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Natural Resources Conservation Service In cooperation with the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

Soil Survey of Greater Fairbanks Area, Alaska



How To Use This Soil Survey

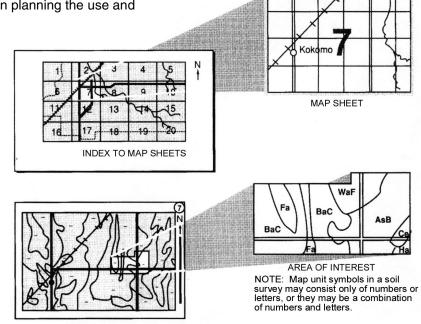
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



MAP SHEET

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural and Forestry Experiment Station, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this survey began in 1996 and was completed in 2000. Unless otherwise indicated, statements in this publication refer to conditions in the Survey Area in 2000. This survey was made for the Greater Fairbanks Area, Alaska by the Natural Resources Conservation Service; the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover: A typical landscape in the Greater Fairbanks Area. Mine tailings are in the foreground with Minto, Fairbanks, and Steese soils on the hills in the background.

Additional information about the nation's natural resources is available on the Natural Resources Conservation Service home page on the World Wide Web. The address is http://www.nrcs.usda.gov.

Contents

How To Use This Soil Survey	3	122—Fairbanks-Steese complex, 12 to 20	
Foreword		percent slopes	26
General Nature of the Survey Area		123—Fairbanks-Steese complex, 20 to 30	
Geology		percent slopes	27
Climate	12	124—Fubar-Piledriver complex,	
Forestry		occasionally flooded	28
Use and Management of Soils for		125—Gilmore silt loam, 3 to 7 percent	
Agriculture	13	slopes	28
Subsistence		126—Gilmore silt loam, 7 to 12 percent	
Land Clearing	13	slopes	29
Adapted Crops		127—Gilmore silt loam, 12 to 20 percent	
Irrigation		slopes	29
Fertilizer Requirements		128—Gilmore silt loam, 20 to 30 percent	
How This Survey Was Made		slopes	30
Detailed Soil Map Unit	15	129—Gilmore silt loam, 30 to 45 percent	
101—Bolio peat		slopes	30
102—Bradway very fine sandy loam		130—Gilmore silt loam, 45 to 70 percent	
103—Chatanika mucky silt loam, 0 to 3		slopes	31
percent slopes	17	131—Gilmore-Ester complex, 12 to 70	
104—Chatanika mucky silt loam, 3 to 7		percent slopes	31
percent slopes	17	132—Gilmore-Steese complex, 3 to 15	
105—Chatanika mucky silt loam, 7 to 12		percent slopes	32
percent slopes	18	133—Goldstream peat, 0 to 3 percent	
106—Chatanika mucky silt loam, 12 to 20		slopes	33
percent slopes	18	134—Goldstream peat, 3 to 7 percent	
107—Chatanika-Goldstream complex		slopes	33
108—Chena very fine sandy loam		135—Goldstream-Histels complex, 0 to 3	
109—Dumps, landfill		percent slopes	34
110—Dumps, mine		136—Histels	
111—Eielson fine sandy loam		137—Jarvis fine sandy loam	
112—Eielson-Piledriver complex		138—Jarvis-Chena complex	
113—Eielson-Tanana complex		139—Jarvis-Salchaket complex	
114—Ester peat, 20 to 45 percent slopes		140—Lemeta peat	
115—Ester peat, very steep		141—Liscum-Noonku complex	
116—Fairbanks silt loam, 3 to 7 percent		142—Minto silt loam, 0 to 3 percent slopes	
slopes	23	143—Minto silt loam, 3 to 7 percent slopes	
117—Fairbanks silt loam, 7 to 12 percent		144—Minto silt loam, 7 to 12 percent slopes	
slopes	24	145—Minto-Chatanika complex, 0 to 3	
118—Fairbanks silt loam, 12 to 20 percent		percent slopes	40
slopes	24	146—Minto-Chatanika complex, 3 to 7	
119—Fairbanks silt loam, 20 to 30 percent		percent slopes	40
slopes		147—Minto-Chatanika complex, 7 to 12	
120—Fairbanks silt loam, 30 to 45 percent		percent slopes	41
slopes		148—Minto-Chatanika complex, 12 to 20	- •
121—Fairbanks silt loams, strongly sloping		percent slopes	42
and steep		149—Mosquito mucky peat	
F			

150—Mosquito-Noonku complex43	187—Water	64
151—Noonku very fine sandy loam44	Soil Properties	65
152—North Pole fine sandy loam44	Engineering Index Properties	
153—North Pole-Mosquito-Liscum complex45	Physical Properties	
154—North Pole-Noonku complex46	Chemical Properties	
155—Peede silt loam47	Water Features	
156—Peede-Mosquito complex47	Soil Features	69
157—Piledriver very fine sandy loam48	Use and Management of the Soil	71
158—Piledriver-Eielson complex48	Land Capability Classification	
159—Piledriver-Fubar complex49	Interpretive Ratings	
160—Pits, gravel50	Rating Class Terms	
161—Pits, quarry50	Numerical Ratings	
162—Riverwash50	Forest Productivity	72
163—Salchaket very fine sandy loam50	Forest Management	
164—Salchaket-Typic Cryorthents complex51	Engineering	
165—Saulich peat, 3 to 7 percent slopes51	Building Site Development	
166—Saulich peat, 7 to 12 percent slopes52	Sanitary Facilities	
167—Saulich peat, 12 to 20 percent slopes52	Construction Materials	
168—Saulich-Minto complex, 3 to 12	Hydric Soils	
percent slopes53	Key To Hydric Soil Criteria	
169—Saulich-Minto complex, 12 to 20	Classification of the Soils	
percent slopes54	Taxonomic Units and Their Morphology	
170—Steese silt loam, 3 to 7 percent slopes54	Bolio Series	
171—Steese silt loam, 7 to 12 percent	Bradway Series	80
slopes55	Brigadier Series	
172—Steese silt loam, 12 to 20 percent	Chatanika Series	
slopes55	Chena Series	
173—Steese silt loam, 20 to 30 percent	Eielson Series	84
slopes56	Ester Series	85
174—Steese silt loam, 30 to 45 percent	Fairbanks Series	85
slopes56	Fubar Series	86
175—Steese silt loam, 45 to 70 percent	Gilmore Series	87
slopes57	Goldstream Series	88
176—Steese-Gilmore complex, 12 to 20	Histels	89
percent slopes57	Histic Cryaquepts	89
177—Steese-Gilmore complex, 20 to 30	Jarvis Series	90
percent slopes58	Lemeta Series	91
178—Steese-Gilmore complex, 30 to 45	Liscum Series	92
percent slopes59	Minto Series	92
179—Steese-Gilmore complex, 45 to 70	Mosquito Series	93
percent slopes60	Noonku Series	94
180—Tanacross peat60	North Pole Series	95
181—Tanana mucky silt loam61	Peede Series	96
182—Tanana-Mosquito complex61	Piledriver Series	97
183—Typic Cryaquent, Histic Cryaquept,	Salchaket Series	98
and Terric Cryofibrist soils62	Saulich Series	99
184—Typic Cryorthents, pit spoil63	Steese Series	99
185—Typic Cryorthents-Urban land	Tanacross Series	100
complex63	Tanana Series	101
186—Urban land64	Terric Cryofibrists	102

Typic Cryaquents103	Table 10. Soil Features	177
Typic Cryorthents104	Table 11. Land Capability	
Formation of the Soils105	Table 12. Forest Productivity	
References107	Table 13. Forestland Management: Erosio	
Glossary109	Hazard, Road Limitations	
Tables119	Table 14. Building Site Development:	
Table 1.—Temperature and Precipitation at	Structures	206
Fairbanks, Alaska120	Table 15. Building Site Development: Site	
Table 2.—Probability of Frost at Fairbanks,	Improvements	219
Alaska 121	Table 16. Sanitary Facilities: Sewage	
Table 3.—Growing Season at Fairbanks,	Treatment	231
Alaska 121	Table 17. Sanitary Facilities: Landfill	248
Table 4.—Acreage and Proportionate Extent	Table 18. Construction Materials: Gravel	
of the Area122	and Sand	261
Table 5. Engineering Index Properties 124	Table 19. Construction Materials: Topsoil	
Table 6. Engineering Sieve Data134	and Roadfill	
Table 7. Physical Properties of the Soils 145	Table 20. Hydric Soils List	281
Table 8. Chemical Properties of the Soils 155	Table 21. Classification of the Soils	295
Table 9. Water Features165		

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Foreword

This soil survey contains information that can be used in land-planning programs in the Greater Fairbanks Area, Alaska. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Government agencies, community officials, Alaska Native tribes, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock or to permafrost. Some are too unstable to be used as a foundation for buildings or roads. Wet soils are poorly suited to use for waste treatment systems. A high water table makes a soil poorly suited to basements or underground installations.

Many soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information is available at the Fairbanks office of the Natural Resources Conservation Service or Alaska Cooperative Extension.

Shirley Gammon State Conservationist Natural Resources Conservation Service

Soil Survey of the Greater Fairbanks Area, Alaska

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United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; and the University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

General Nature of the Survey Area

The Greater Fairbanks Area is in the interior of Alaska (Figure 1). The survey area is approximately 257,703 acres (104,370 h) in size. The population center of the survey area is the city of Fairbanks, which is also the commercial hub of interior and northern Alaska and the second largest city in the state.

The Greater Fairbanks Area lies within two Major Land Resource Areas: the Interior Alaska Highlands and the Interior Alaska Lowlands. The Interior Alaska Lowlands portion of the survey area includes the broad, level flood plain that boarders the Tanana River and its main tributary in this area, the Chena River. Riverine features dominate the landscape and include meandering streams, sloughs, and oxbow lakes. The Interior Alaska Highlands portion of the survey area consists mostly of low mountains and dissected hills interrupted by flat-bottomed valleys. Slopes are generally steep. Usually, gently sloping alluvial fans lie between the Highlands' hills and the Lowlands' flood plain, but in many places the transition between the level flood plain and steep hills is abrupt.

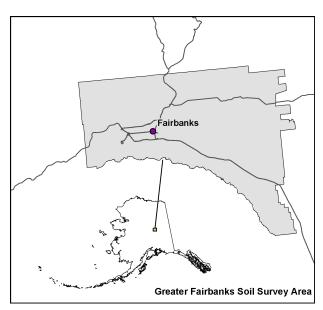


Figure 1.—Location of Greater Faribanks Area in Alaska.

Geology

The Tanana River valley is a structural basin between the Alaska Range on the south and the

Interior Alaska Highlands on the north. Much of the floor of this basin is below sea level and covered by 330 to almost 660 feet (100 to almost 200 m) of Quaternary fluvial and glaciofluvial sediments primarily from the Alaska Range. The history of these deposits relate to glacial advances from Illinoian to Wisconsin times. The glaciofluvial sand and gravel are covered with finer sediments and organic material of varying thickness. These deposits are saturated with water, in most places below the depth of observation for this survey (6 ft. or 2 m) but occasionally within a foot or two of the surface. Permafrost is present in the basin and covers approximately one-third to one-half of the area. Elevations in the Tanana River valley range from about 400 to 475 feet (121 to 144 m) above sea level.

Elevations in the Interior Alaska Highlands range from about 450 to 2,006 feet (136 to 610 m). Geologic materials consist of weathered bedrock covered with windblown silt (loess). The predominant bedrock in the area is highly deformed Paleozoic and Precambrian schist. The schist is highly weathered and fractured near the surface with local intrusions of igneous rocks that are mainly granite, quartz, diorite, and basalt. The loess is only about a foot or two thick (< 1 m) on most hilltops and upper slopes. It may be many feet thick on hills nearest the Tanana River and on the lower slopes of hills elsewhere where the loess has been eroded from the hillsides and has accumulated on lower slopes and in narrow upland valleys. Permafrost is present on lower slopes, valley bottoms, and northfacing slopes. Large bodies of ground ice are present in the thick silty deposits on lower slopes and valley bottoms. Periglacial features such as pingos, thermokarst pits and mounds, ice wedge polygons, and beaded streams dominate these lower slopes and upland valleys.

Climate

The survey area has a continental subarctic climate with long, cold winters and short, warm summers. Summer (June, July, and August) temperatures average 58 degrees F (15 degrees C). Winter (November through March) temperatures average 0.5 degree F (-18 degrees C). Extreme summer temperatures may exceed 90 degrees F (32 degrees C) while extreme winter temperatures may dip below -60 degrees F (-51 degrees C). The average annual precipitation is 12 inches (30 cm), with July and August on average the wettest months and April the driest. Snow covers the ground continuously from October to late April or early May.

Tables 1, 2, and 3 give a detailed summary of climatic data.

Forestry

The forest types in the Greater Fairbanks Area are a mosaic of patterns related to fire history, slope and aspect, and the presence or absence of permafrost. Forest stands are classified by the dominant species, but most are a mixture of two or more species.

The forest vegetation pattern of this area is complex. Forests of white spruce, paper birch, and aspen dominate lower slopes and most south-facing slopes. Black spruce forests typically grow at higher elevations on north-facing slopes and at lower elevations in areas where drainage is impeded.

The white spruce forests of interior Alaska are the best developed and most productive forests of this region. They have a minor component of paper birch and balsam poplar and, on the best sites, trees will be 98 feet (30 m) in height and 35 inches (90 cm) in diameter. Tree densities may be as high as 9,800 to 12,000 per acre (4,000 to 5,000/h) in younger stands but are typically between 1,400 and 2,400 per acre (600 and 1,000/h) in older stands. Where the canopy is closed an alder and willow shrub laver can be found. Common smaller shrubs found in the white spruce forests are bog blueberry, crowberry, lingonberry, Labrador tea, and dwarf birch. White spruce forests can regenerate after a fire but often are the result of a successional change from hardwood pioneering species such as paper birch and aspen. The white spruce forests have economic importance in terms of supplying local saw mills with timber and providing home building logs for the area.

Paper birch forests are found on better-drained, usually silty-textured soils. These forests are typically a result of fires and will usually be replaced through succession by white spruce or black spruce forests. Trees range from 59 to 82 feet (18 to 25 m) in height and up to 18 inches (45 cm) in diameter. Tree densities range from 15,000 trees per acre (6,000/h) in younger stands to 400 trees per acre (160/h) in mature stands. Common shrub components are alder and highbush cranberry. Lingonberry and twinflower are common ground covers, as is Canada bluejoint if stocking density is low.

Black spruce forests dominate wetter and colder sites. The trees may attain a height of 30 feet (9 m) with a diameter of 4 inches (10 cm) in the course of 100 years. These are low productivity sites with young stocking densities up to 15,000 trees per acre

(6,000/h) and mature densities that may be as high as 10,000 trees per acre (4,000/h). Shrubs associated with black spruce forests are alder, willow, and Labrador tea. Sphagnum and club mosses with some crowberry, lingonberry, and bog blueberry dominate ground cover.

Aspen forests and balsam poplar forests are also found in the Greater Fairbanks Area. These forests often grow in areas of relatively recent soil disturbance, such as flood plains or areas subjected to hot intense fires.

Use and Management of Soils for Agriculture

Soils have a wide range of characteristics that influence their potential for agricultural development. A thorough understanding of soil properties can ensure maximum agricultural benefits while preserving the integrity of the resource base.

Woodland covers most of the soils in the survey area. Some of these soils are suitable for clearing and development for pasture, hay, and cool season row crops. North-facing slopes are generally not suitable for agricultural development because they lack sun exposure and tend to be colder. They may also settle unevenly after clearing because of permafrost. Ridge tops generally have good sun exposure but the soils tend to be shallow and acidic. Erosion control practices are required on ridges and south-facing slopes to maintain productivity. Level and nearly level ground may be suitable for agriculture unless it is subject to frequent flooding or has a high water table. Some permafrost soils can be developed for agriculture but other permafrost soils may settle unevenly and be subject to thermokarst. The local offices of the Natural Resources Conservation Service or Alaska Cooperative Extension can provide guidance on the suitability of particular soils for crop production.

Subsistence

The Greater Fairbanks Area has a tradition of subsistence use of the native plant community. Harvesting of native plants for food, medicine, fiber, and fodder is an important land use. When developing land for agricultural production, consider managing a portion of the land for berry, birch bark or syrup production or as a wood lot. For more information about the use of native plants, consult local Alaska native groups, Alaska Cooperative Extension, or other ethnic organizations.

Land Clearing

The University of Alaska Cooperative Extension Service publication *Efficient Land Clearing Techniques* (Colla and Southwick, 1987), describes methods for clearing land. The Fairbanks Soil and Water Conservation District or the Natural Resources Conservation Service can assist farmers in developing a plan for bringing land into production. These offices can also provide information on appropriate land clearing and breaking techniques and the suitability of soils for specific crops. They can also provide referrals to federal, state, and local agencies for information on regulations affecting land clearing and removal of clearing debris.

Adapted Crops

Crops that will grow in cool climates with long summer days are best suited for this area. New crop varieties are released every year and changes in varieties, farming practices, and markets affect what crops are grown in the area. Historically grass hay has been a staple crop. Spring seeded small grains are grown for livestock feed and human consumption. Grass for seed, legumes such as field peas, and cool season vegetables have been successful crops. Potatoes for both seed and table are also grown and exported. Small fruits and specialty crops have potential for the area, particularly for niche markets. The Alaska Cooperative Extension can provide information and advice on suitable crop varieties and production techniques. The Alaska Division of Agriculture has information regarding marketing and production of agricultural products and the Alaska Agricultural Statistics Service can provide crop yield data and production trends.

Irrigation

Fairbanks has an average annual precipitation of only 10 to 13 inches (25 to 33 cm). Irrigation will improve crop growth and allow better use of the available plant nutrients. Vegetable crops are usually grown under irrigation. Potatoes have been grown under dryland conditions but yields are increased in some years by irrigation. Even grass hay yields can be improved with irrigation, particularly during establishment. The economic feasibility of irrigation, however, must be determined on a case by case basis. The Natural Resources Conservation Service and the Fairbanks Soil and Water Conservation

District can help farmers decide if irrigation is appropriate for their operation and what type of irrigation system best suits their needs.

Fertilizer Requirements

The soils of the Greater Fairbanks Area do not have enough natural fertility to sustain farm or garden crops without the addition of commercial or organic fertilizer. The Natural Resources Conservation Service recommends soil testing on a regular schedule to monitor the fertility of the soil. Soil analysis should include the macronutrients nitrogen, phosphorus, and potassium (N-P-K). Many soils in the area are also deficient in micronutrients. Many crops, for example, do better when boron is added to the soil. Micronutrients, however, can be toxic to plants if over applied. The Alaska Cooperative Extension makes fertilizer recommendations for farm and garden crops, lawns and landscaping plants.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location, as well as a discussion of their suitability, limitations, and management for specified uses. To characterize and map the soils, soil scientists dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The soil scientists also observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of native plants; and the kinds of geologic materials.

Before beginning the fieldwork, relevant information on the climate, geology, geomorphology, hydrology, and vegetation of the survey area was assembled. Aerial photography of the survey area was acquired and prepared for field use and mapping. Aerial photography taken in 1996 was enlarged to a scale of 1:24,000 for use during the survey fieldwork. Final compilation for the publication was done on 1:25,000 scale orthophotography.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific

segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color. texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Detailed Soil Map Unit

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called non-contrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the

landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. 145—Minto-Chatanika complex, 0 to 3 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. There are no associations mapped in the Greater Fairbanks Area.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of

the major soils or miscellaneous areas, or it can be made up of all of them. 182-Typic Cryaquent, Histic Cryaquent and Terric Cryofibrist, is an example of an undifferentiated group.

This survey includes miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. 109—Dumps, landfill, is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

101—Bolio peat

Elevation: 423 to 1,201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Bolio and Similar Soils

Extent: 70 to 85 percent of the map unit

Landform: depressions on terraces, flats on terraces

Slope shape: concave, linear Slope range: 0 to 2 percent

Parent material: herbaceous organic material

Depth to permafrost: 14 to 28 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: negligible

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 5 inches

Ponding: frequent

Available water capacity (approximate): 3.5 inches Vegetation: black spruce and tamarack woodland

Representative Profile:

Oi—0 to 12 inches; brown peat, high permeability

Oe—12 to 16 inches; very dark gray mucky peat,

moderately high permeability

Of—16 to 72 inches; very dark grayish brown permanently frozen mucky peat, impermeable

Minor Components

Goldstream and similar soils: 0 to 10 percent of the map unit

Lemeta and similar soils: 5 to 15 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the

map unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

102—Bradway very fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Bradway and Similar Soils

Extent: 75 to 90 percent of the map unit

Landform: depressions Slope shape: concave Slope range: 0 to 2 percent Parent material: alluvium

Depth to permafrost: 18 to 35 inches Hazard of erosion (organic mat removed): by

water—slight; by wind—slight

Runoff: negligible

Drainage class: poorly drained

Flooding: occasional

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 4.5 inches

Vegetation: dwarf birch and willow scrub

Representative Profile:

Oi-0 to 7 inches; dark brown slightly decomposed plant material, high permeability

A-7 to 10 inches: dark gravish brown mucky silt

loam, moderately high permeability Cg-10 to 26 inches; gray stratified very fine

sandy loam to fine sand, high permeability Cfg-26 to 72 inches; dark brown permanently

frozen material, impermeable

Minor Components

Mosquito and similar soils: 0 to 10 percent of the map unit

North Pole and similar soils: 0 to 10 percent of the map unit

Tanana and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, ponding, flooding, frost action

103—Chatanika mucky silt loam, 0 to 3 percent slopes

Elevation: 423 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes

Slope shape: linear, concave Slope range: 0 to 3 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability

A-4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability

Cfg—21 to 72 inches; very dark gravish brown permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 5 to 15 percent of the map unit

Chatanika, slopes more than 3 percent, and similar soils: 5 to 10 percent of the map unit

Minto and similar soils: 3 to 7 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map

Histels and similar soils: 0 to 5 percent of the map

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

104—Chatanika mucky silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes

Slope shape: linear, concave Slope range: 3 to 7 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-moderate; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability

A-4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; very dark gravish brown silt loam, moderately high permeability

Cfg-21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Chatanika, slopes more than 7 percent, and similar soils: 0 to 5 percent of the map unit

Goldstream and similar soils: 0 to 10 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

105—Chatanika mucky silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes

Slope shape: concave, linear Slope range: 7 to 12 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high

permeability

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability

Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 7 percent, and similar

soils: 0 to 5 percent of the map unit

Chatanika, slopes more than 12 percent, and similar

soils: 0 to 5 percent of the map unit

Goldstream and similar soils: 0 to 10 percent of the

map unit

Minto and similar soils: 0 to 10 percent of the map

unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

106—Chatanika mucky silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes

Slope shape: linear, concave Slope range: 12 to 20 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability

A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability

Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 12 percent, and similar soils: 0 to 10 percent of the map unit

Goldstream and similar soils: 0 to 10 percent of the map unit

Minto and similar soils: 0 to 10 percent of the map

unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

107—Chatanika-Goldstream complex

Elevation: 423 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 50 to 60 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes

Slope shape: linear, concave Slope range: 0 to 5 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability

A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability

Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Goldstream and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: valley floors Slope shape: concave, linear Slope range: 0 to 5 percent

Parent material: organic material over loess

Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 9 inches; very dark grayish brown

mucky peat, high permeability

—9 to 12 inches: gray mucky silt l

A—9 to 12 inches; gray mucky silt loam, moderately high permeability

Bjjg-12 to 20 inches; dark brown silt loam,

moderately high permeability

Cfg—20 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto and similar soils: 0 to 5 percent of the map unit Chatanika, slopes more than 5 percent, and similar

soils: 0 to 5 percent of the map unit

Histels and similar soils: 0 to 5 percent of the map

unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

108—Chena very fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Chena and Similar Soils

Extent: 80 to 95 percent of the map unit

Landform: stream terraces

Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: excessively drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 3.5 inches Vegetation: white spruce and balsam poplar forest

Representative Profile:

Oi—0 to 4 inches; very dark gray slightly decomposed plant material, high permeability

C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high permeability

2C2—9 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 0 to 10 inches of loamy material over sand and gravel.

Minor Components

Jarvis and similar soils: 0 to 10 percent of the map

unit

Noonku and similar soils: 0 to 10 percent of the map

unit

Management Considerations

Soil-related factors: permeability, flooding, sand and gravel

109—Dumps, landfill

Elevation: 397 to 1,968 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Dumps, landfill

Extent: 100 percent of the map unit

Landform: sanitary landfills

Slope shape: linear, convex, concave

Slope range: 0 to 5 percent

110—Dumps, mine

Elevation: 397 to 1,968 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Dumps, mine

Extent: 100 percent of the map unit

Landform: spoil piles

Slope shape: concave, convex, linear

Slope range: 0 to 70 percent

Management Considerations

Soil-related factors: excess slope, large stones, permeability

111—Eielson fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Eielson and Similar Soils

Extent: 70 to 90 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest

Representative Profile:

Oi—0 to 2 inches; very dark brown slightly decomposed plant material, high permeability

O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability

C1—49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability

2C2—71 to 72 inches; very dark brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy

material over sand and gravel.

Minor Components

Peede and similar soils: 10 to 15 percent of the map

unit

Tanana and similar soils: 0 to 15 percent of the map

unit

Management Considerations

Soil-related factors: flooding, water table, ponding,

frost action

112—Eielson-Piledriver complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Eielson and Similar Soils

Extent: 50 to 70 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water—slight; by wind—severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high permeability

O/C—2 to 49 inches; very dark brown very fine sandy loam, moderately high permeability

C1—49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability

2C2—71 to 72 inches; dark grayish brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy

material over sand and gravel.

Piledriver and Similar Soils

Extent: 25 to 40 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: nealigible

Drainage class: somewhat poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

C1—3 to 15 inches; dark olive brown very fine sandy loam, moderately high permeability

C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Fubar and similar soils: 0 to 5 percent of the map

unit

Noonku and similar soils: 0 to 5 percent of the map

unit

Salchaket and similar soils: 0 to 5 percent of the

map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

113—Eielson-Tanana complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Eielson and Similar Soils

Extent: 30 to 60 percent of the map unit

Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May-

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest

Representative Profile:

Oi—0 to 2 inches; olive brown and dark gray slightly decomposed plant material, high permeability

O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability

C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high permeability

2C2—71 to 72 inches; olive brown and dark gray very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Tanana and Similar Soils

Extent: 20 to 50 percent of the map unit

Landform: terraces Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium and/or loess over alluvium

Depth to permafrost: 16 to 47 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches: June-Sept.—6 to 12 inches

Ponding: frequent

Available water capacity (approximate): 5.2 inches Vegetation: white spruce, black spruce, and paper birch forest

Representative Profile:

Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability

A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability

Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability

Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit

Tanacross and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, flooding, frost action

114—Ester peat, 20 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Ester and Similar Soils

Extent: 65 to 75 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: linear

Slope range: 20 to 45 percent

Parent material: mossy organic material over colluvium and/or loess over residuum weathered

from schist

Depth to permafrost: 7 to 30 inches

Depth to bedrock (paralithic): 14 to 39 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—4 inches

Ponding: none

Available water capacity (approximate): 1.3 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 9 inches; olive brown peat, high permeability

ABjjf—9 to 12 inches; black permanently frozen mucky silt loam, moderately high permeability

2Cjjf—12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, impermeable

2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 0 to 5 percent of the map unit

Ester, rolling, and similar soils: 0 to 10 percent of the map unit

Ester, very steep, and similar soils: 0 to 5 percent of the map unit

Gilmore and similar soils: 0 to 5 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map

Steese and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

115—Ester peat, very steep

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Ester and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: linear

Slope range: 45 to 70 percent

Parent material: mossy organic material over

colluvium and/or loess over residuum weathered

from schist

Depth to permafrost: 7 to 30 inches

Depth to bedrock (paralithic): 14 to 39 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—4 inches Ponding: none

Available water capacity (approximate): 1.3 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 9 inches; black peat, high permeability

ABjif—9 to 12 inches; dark reddish brown permanently frozen mucky silt loam, moderately high permeability

2Cjjf—12 to 21 inches; olive brown permanently frozen very channery silt loam, impermeable

2Crf-21 to 72 inches; black permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 5 to 10 percent of the map unit

Ester, slopes less than 45 percent, and similar soils: 5 to 10 percent of the map unit

Gilmore and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

116—Fairbanks silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 3 to 7 percent Parent material: loess

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking

aspen forest

Representative Profile:

Oi-0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability

A,Bw-3 to 30 inches; light olive brown silt loam, moderately high permeability

C—30 to 72 inches; gravish brown or light olive brown silt loam, moderately high permeability

Minor Components

Minto and similar soils: 5 to 12 percent of the map unit

Fairbanks, slopes less than 3 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: frost action

117—Fairbanks silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 7 to 12 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking

aspen forest Representative Profile:

Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability

A,Bw-3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability

C-30 to 72 inches; light olive brown silt loam,

moderately high permeability

Minor Components

Fairbanks, slopes more than 12 percent, and similar soils: 0 to 15 percent of the map unit

Fairbanks, slopes less than 7 percent, and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 10 percent of the map

unit

Management Considerations

Soil-related factors: excess slope, frost action

118—Fairbanks silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 65 to 80 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex. linear Slope range: 12 to 20 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches

Representative Profile:

Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability

A,Bw-3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability

C-30 to 72 inches; light olive brown silt loam,

moderately high permeability

Minor Components

Fairbanks, slopes less than 12 percent, and similar soils: 0 to 15 percent of the map unit

Fairbanks, slopes more than 20 percent, and similar

soils: 0 to 15 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit Steese and similar soils: 0 to 10 percent of the map

unit

Management Considerations

Soil-related factors: excess slope, frost action

119—Fairbanks silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 20 to 30 percent Parent material: loess

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking

aspen forest Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability

A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability

C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 20 percent, and similar soils: 0 to 15 percent of the map unit

Fairbanks, slopes more than 30 percent, and similar soils: 0 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

120—Fairbanks silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 80 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 30 to 45 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:

Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability

A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability

C—30 to 72 inches; light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 30 percent, and similar soils: 0 to 5 percent of the map unit

Fairbanks, slopes more than 45 percent, and similar soils: 0 to 15 percent of the map unit

Steese and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

121—Fairbanks silt loams, strongly sloping and steep

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks, strongly sloping, and Similar Soils

Extent: 55 to 65 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 7 to 15 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability

A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability

C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Fairbanks, steep, and Similar Soils

Extent: 25 to 35 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 30 to 55 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability

A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability

C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Minor Components

Minto and similar soils: 0 to 10 percent of the map

Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

122—Fairbanks-Steese complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 50 to 60 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 12 to 20 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking

aspen forest

Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability

A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability

C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Steese and Similar Soils

Extent: 25 to 40 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex, linear Slope range: 12 to 20 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high permeability

A—2 to 5 inches; dark brown silt loam, moderately high permeability

Bw—5 to 27 inches; brown silt loam, moderately high permeability

2C—27 to 33 inches; light olive brown very channery silt loam, high permeability

2Cr—33 to 72 inches; light olive brown weathered bedrock

Minor Components

Fairbanks, slopes less than 12 percent, and similar soils: 2 to 7 percent of the map unit

Fairbanks, slopes more than 20 percent, and similar soils: 2 to 7 percent of the map unit

Steese, slopes more than 20 percent, and similar soils: 2 to 5 percent of the map unit

Gilmore and similar soils: 0 to 5 percent of the map

Steese, slopes less than 12 percent, and similar soils: 2 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

123—Fairbanks-Steese complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 30 to 60 percent of the map unit

Landform: hills

Position on slope: backslopes Slope shape: convex, linear Slope range: 20 to 30 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability

A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability

C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Steese and Similar Soils

Extent: 15 to 50 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex, linear Slope range: 20 to 30 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Pondina: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; light olive brown silt loam, moderately high permeability

Bw—5 to 27 inches; dark brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Fairbanks, slopes less than 20 percent, and similar

soils: 3 to 12 percent of the map unit

Steese, slopes less than 20 percent, and similar

soils: 3 to 12 percent of the map unit

Gilmore and similar soils: 0 to 5 percent of the map

Steese, slopes more than 30 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

124—Fubar-Piledriver complex, occasionally flooded

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Fubar and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: moderately well drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—54 inches *Ponding:* none

Available water capacity (approximate): 3.4 inches Vegetation: white spruce, balsam poplar, and paper birch forest

Representative Profile:

Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high permeability

C1—2 to 10 inches; dark gray stratified fine sand to silt loam, moderately high permeability

2C2—10 to 72 inches; dark brown very gravelly coarse sand, high permeability

Note: This soil has 1 to 10 inches of loamy material

over sand and gravel.

Piledriver and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability

C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability

C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 0 to 5 percent of the map

unit

Noonku and similar soils: 0 to 5 percent of the map

unit

North Pole and similar soils: 0 to 5 percent of the

map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permeability, sand and gravel

125—Gilmore silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 70 to 90 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 3 to 7 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches

Pondina: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability

A—3 to 6 inches; dark brown silt loam, moderately high permeability

Bw—6 to 12 inches; olive brown silt loam, moderately high permeability

2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability

2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 3 percent, and similar soils: 5 to 10 percent of the map unit Gilmore, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit Steese and similar soils: 2 to 10 percent of the map

unit

Management Considerations

Soil-related factors: bedrock

126—Gilmore silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 65 to 75 percent of the map unit

Landform: hills

Position on slope: backslopes, summits

Slope shape: linear, convex Slope range: 7 to 12 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Drainage class: well drained

Flooding: none

Runoff: medium

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

A—3 to 6 inches; yellowish brown silt loam, moderately high permeability

Bw—6 to 12 inches; olive brown silt loam,

moderately high permeability 2BC—12 to 19 inches; dark brown very channery

silt loam, high permeability 2Cr—19 to 72 inches; dark brown weathered

bedrock, high permeability

Minor Components

Gilmore, slopes more than 12 percent, and similar soils: 10 to 15 percent of the map unit

Gilmore, slopes less than 7 percent, and similar soils: 5 to 10 percent of the map unit

Steese and similar soils: 5 to 10 percent of the map

unit

Management Considerations

Soil-related factors: excess slope, bedrock

127—Gilmore silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 12 to 20 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches

Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability

A—3 to 6 inches; olive brown silt loam, moderately high permeability

Bw—6 to 12 inches; dark brown silt loam, moderately high permeability

2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability

2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 12 percent, and similar soils: 5 to 12 percent of the map unit
Gilmore, slopes more than 20 percent, and similar soils: 10 to 15 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

128—Gilmore silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 60 to 80 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 20 to 30 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

A—3 to 6 inches; yellowish brown silt loam, moderately high permeability

Bw—6 to 12 inches; olive brown silt loam, moderately high permeability

2BC—12 to 19 inches; dark brown very channery silt loam, high permeability

2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 20 percent, and similar soils: 5 to 15 percent of the map unit

Steese and similar soils: 5 to 15 percent of the map

Gilmore, slopes more than 30 percent, and similar soils: 0 to 5 percent of the map unit

Ester and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

129—Gilmore silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 80 to 90 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 30 to 45 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

A—3 to 6 inches; yellowish brown silt loam, moderately high permeability

Bw—6 to 12 inches; olive brown silt loam, moderately high permeability

2BC—12 to 19 inches; dark brown very channery silt loam, high permeability

2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 30 percent, and similar soils: 5 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map

Rock outcrop: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

130—Gilmore silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 80 to 90 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: convex, linear Slope range: 45 to 70 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability

A—3 to 6 inches; dark brown silt loam, moderately high permeability

Bw—6 to 12 inches; olive brown silt loam, moderately high permeability

2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability

2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Ester and similar soils: 0 to 10 percent of the map

Gilmore, slopes less than 45 percent, and similar soils: 0 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map

uni

Rock outcrop: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

131—Gilmore-Ester complex, 12 to 70 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 35 to 55 percent of the map unit

Landform: hills

Position on slope: backslopes, summits

Slope shape: linear, convex Slope range: 12 to 20 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi-0 to 3 inches; olive brown slightly decomposed plant material, high permeability

A-3 to 6 inches; dark brown silt loam, moderately high permeability

Bw-6 to 12 inches; yellowish brown silt loam, moderately high permeability

2BC—12 to 19 inches; olive brown very channery silt loam, high permeability

2Cr-19 to 72 inches; olive brown weathered bedrock, high permeability

Ester and Similar Soils

Extent: 30 to 50 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: linear

Slope range: 20 to 70 percent

Parent material: mossy organic material over colluvium and/or loess over residuum weathered

from schist

Depth to permafrost: 7 to 30 inches

Depth to bedrock (paralithic): 14 to 39 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Floodina: none

Depth to high water table (approximate): April-

Sept.—4 inches Ponding: none

Available water capacity (approximate): 1.3 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 9 inches; olive brown peat, high permeability

ABjif—9 to 12 inches; black permanently frozen mucky silt loam, moderately high permeability

2Cijf—12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, impermeable

2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 7 to 15 percent of the

map unit

Steese and similar soils: 0 to 7 percent of the map

unit

Saulich and similar soils: 0 to 5 percent of the map

unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

132—Gilmore-Steese complex, 3 to 15 percent slopes

Elevation: 499 to 2.799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 60 to 70 percent of the map unit

Landform: hills

Position on slope: backslopes, summits

Slope shape: convex, linear Slope range: 3 to 15 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by

water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi-0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability

A-3 to 6 inches: olive brown silt loam. moderately high permeability

Bw-6 to 12 inches; dark brown silt loam, moderately high permeability

2BC—12 to 19 inches; vellowish brown very channery silt loam, high permeability 2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Steese and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex, linear Slope range: 3 to 15 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest Representative Profile:

> Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability

A-2 to 5 inches; brown silt loam, moderately high permeability

Bw-5 to 27 inches; light olive brown silt loam, moderately high permeability

2C-27 to 33 inches; dark brown very channery silt loam, high permeability

2Cr-33 to 72 inches: dark brown weathered bedrock

Minor Components

Steese, slopes more than 15 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

133—Goldstream peat, 0 to 3 percent slopes

Elevation: 397 to 1.201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 70 to 85 percent of the map unit

Landform: valley floors Slope shape: concave, linear Slope range: 0 to 3 percent

Parent material: organic material over loess

Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches

Vegetation: black spruce woodland

Representative Profile:

Oi-0 to 9 inches; gray mucky peat, high permeability

A-9 to 12 inches: dark brown mucky silt loam. moderately high permeability

Bjjg—12 to 20 inches; very dark grayish brown silt loam, moderately high permeability

Cfg—20 to 72 inches; gray permanently frozen material, impermeable

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit

Histels and similar soils: 0 to 5 percent of the map

Goldstream, slopes more than 3 percent, and similar soils: 0 to 5 percent of the map unit

Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

134—Goldstream peat, 3 to 7 percent slopes

Elevation: 397 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 80 to 85 percent of the map unit

Landform: valley floors Slope shape: concave, linear Slope range: 3 to 7 percent

Parent material: organic material over loess

Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-moderate; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 9 inches; dark brown mucky peat, high permeability

A-9 to 12 inches; very dark grayish brown mucky silt loam, moderately high permeability

Bjjg—12 to 20 inches; gray silt loam, moderately high permeability

Cfg-20 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Chatanika and similar soils: 0 to 15 percent of the map unit

Histels and similar soils: 0 to 7 percent of the map

Minto and similar soils: 0 to 5 percent of the map unit Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

135—Goldstream-Histels complex, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 40 to 60 percent of the map unit Landform: valley floors

Slope shape: concave, linear Slope range: 0 to 3 percent

Parent material: organic material over loess

Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches

Representative Profile:

Oi-0 to 9 inches; dark brown mucky peat, high

permeability

A-9 to 12 inches; very dark grayish brown mucky silt loam, moderately high permeability

Bjjg—12 to 20 inches; gray silt loam, moderately

high permeability

Cfg—20 to 72 inches; dark brown permanently

frozen material, impermeable

Histels and Similar Soils

Extent: 45 to 50 percent of the map unit

Landform: depressions on terraces, flats on terraces

Slope shape: concave Slope range: 0 to 3 percent

Parent material: organic material over alluvium

and/or loess

Depth to permafrost: 16 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 3.9 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 12 inches; black peat, high permeability

Oe—12 to 17 inches; brown mucky peat, moderately high permeability

Oef—17 to 26 inches; very dark gray

permanently frozen mucky peat, impermeable Cfg—26 to 72 inches; black permanently frozen

material, impermeable

Minor Components

Terric Cryofibrists and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table. ponding, excess organic matter, thermokarst, frost action

136—Histels

Elevation: 423 to 1,201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Histels and Similar Soils

Extent: 85 to 90 percent of the map unit

Landform: depressions on terraces, flats on terraces

Slope shape: concave Slope range: 0 to 3 percent

Parent material: organic material over alluvium

and/or loess

Depth to permafrost: 16 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 3.9 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 12 inches; very dark gray peat, high permeability

Oe—12 to 17 inches; brown mucky peat, moderately high permeability

Oef—17 to 26 inches; black permanently frozen

mucky peat, impermeable

Cfg—26 to 72 inches; very dark gray permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 10 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

137—Jarvis fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Jarvis and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—more than 72 inches

Ponding: occasional

Available water capacity (approximate): 5.9 inches Vegetation: white spruce, balsam poplar, and paper

birch forest

Representative Profile:

Oe—0 to 3 inches; grayish brown moderately decomposed plant material, high permeability

C1—3 to 6 inches; olive brown very fine sandy

loam, moderately high permeability

C2-6 to 24 inches; black stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3-24 to 72 inches; gray very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Salchaket and similar soils: 5 to 15 percent of the map unit

Chena and similar soils: 0 to 5 percent of the map

Noonku and similar soils: 0 to 10 percent of the map

Tanana and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding, sand and gravel

138—Jarvis-Chena complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Jarvis and Similar Soils

Extent: 50 to 60 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—more than 72 inches

Ponding: occasional

Available water capacity (approximate): 5.9 inches Vegetation: white spruce, balsam poplar, and paper birch forest

Representative Profile:

Oe—0 to 3 inches; grayish brown moderately decomposed plant material, high permeability

C1—3 to 6 inches; olive brown very fine sandy loam, moderately high permeability

C2—6 to 24 inches; black stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—24 to 72 inches; gray very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Chena and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: stream terraces Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: excessively drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 3.5 inches Vegetation: white spruce and balsam poplar forest

Representative Profile:

Oi—0 to 4 inches; grayish brown slightly decomposed plant material, high permeability

C1—4 to 9 inches; olive brown stratified fine sand

to silt loam, high permeability

2C2—9 to 72 inches; very dark gray very gravelly

sand, high permeability

Note: This soil has 0 to 10 inches of loamy material

over sand and gravel.

Minor Components

Noonku and similar soils: 0 to 10 percent of the map

uni

Salchaket and similar soils: 0 to 10 percent of the

map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding, sand and gravel

139—Jarvis-Salchaket complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Jarvis and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—more than 72 inches

Ponding: occasional

Available water capacity (approximate): 5.9 inches Vegetation: white spruce, balsam poplar, and paper

birch forest

Representative Profile:

Oe—0 to 3 inches; black moderately

decomposed plant material, high permeability

C1—3 to 6 inches; olive brown very fine sandy loam, moderately high permeability

C2—6 to 24 inches; grayish brown stratified sand to fine sand to very fine sandy loam,

moderately high permeability

2C3-24 to 72 inches; gray very gravelly sand,

high permeability

Note: This soil has 10 to 40 inches of loamy material

over sand and gravel.

Salchaket and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.—more than 72 inches

Ponding: frequent

Available water capacity (approximate): 9.7 inches Vegetation: white spruce, balsam poplar, and paper birch forest

Representative Profile:

Oi—0 to 3 inches; variegated slightly

decomposed plant material, high permeability C1—3 to 24 inches; dark brown very fine sandy

loam, moderately high permeability

C2—24 to 45 inches; olive brown stratified silt loam to fine sand, moderately high permeability

2C3-45 to 72 inches; dark grayish brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Tanana and similar soils: 0 to 5 percent of the map unit

Chena and similar soils: 0 to 5 percent of the map

Noonku and similar soils: 0 to 5 percent of the map unit

North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding

140—Lemeta peat

Elevation: 423 to 1.201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Lemeta and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: fens on terraces Slope shape: concave, linear Slope range: 0 to 1 percent

Parent material: mossy organic material over

herbaceous organic material Depth to permafrost: 15 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: negligible

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 3.0 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 20 inches; yellowish brown peat, high permeability

Oef-20 to 72 inches; very dark brown permanently frozen mucky peat, impermeable

Minor Components

Bolio and similar soils: 0 to 10 percent of the map

Goldstream and similar soils: 5 to 15 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

141—Liscum-Noonku complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Liscum and Similar Soils

Extent: 45 to 55 percent of the map unit

Landform: alluvial flats Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: negligible

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 4 inches

Ponding: frequent

Available water capacity (approximate): 11.9 inches

Vegetation: sedges and grasses

Representative Profile:

Oi—0 to 3 inches; black peat, high permeability Oa—3 to 11 inches; very dark grayish brown muck, moderately low permeability

A—11 to 15 inches; dark brown mucky silt loam,

moderately high permeability

Bg—15 to 70 inches; olive brown and gray stratified silt loam to loamy fine sand, moderately high permeability

C—70 to 72 inches; olive brown very gravelly sandy loam, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Noonku and Similar Soils

Extent: 35 to 50 percent of the map unit

Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May-

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub

Representative Profile:

Oe—0 to 2 inches; gray moderately decomposed plant material, moderately high permeability

A—2 to 6 inches; dark brown silt loam, moderately high permeability

Cg1—6 to 47 inches; very dark brown stratified

sand to fine sand to very fine sandy loam, moderately high permeability 2Cg2—47 to 72 inches; gray very gravelly sand, high permeability

Minor Components

North Pole and similar soils: 0 to 7 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

142—Minto silt loam, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex

Slope range: 0 to 3 percent Parent material: loess

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: low

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high permeability

A—5 to 9 inches; grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; light olive brown silt loam, moderately high permeability

C—16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 5 to 10 percent of the map unit

Fairbanks and similar soils: 0 to 10 percent of the map unit

Minto, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action

143—Minto silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 60 to 80 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex

Slope range: 3 to 7 percent Parent material: loess

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches *Ponding:* none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; dark brown slightly decomposed plant material, high permeability

A—5 to 9 inches; very dark grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; light olive brown silt loam, moderately high permeability

C—16 to 72 inches; grayish brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 10 to 15 percent of the map unit

Minto, slopes more than 7 percent, and similar soils: 5 to 10 percent of the map unit

Fairbanks and similar soils: 0 to 10 percent of the map unit

Minto, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action

144—Minto silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 50 to 70 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes Slope shape: concave, linear, convex

Slope range: 7 to 12 percent Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches *Ponding:* none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest

Representative Profile:

Oi—0 to 5 inches; grayish brown slightly decomposed plant material, high permeability

A—5 to 9 inches; light olive brown silt loam, moderately high permeability

Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability

C—16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit

Minto, slopes less than 7 percent, and similar soils: 5 to 15 percent of the map unit

Minto, slopes more than 12 percent, and similar soils: 5 to 15 percent of the map unit

Fairbanks and similar soils: 5 to 15 percent of the

map unit

Saulich and similar soils: 0 to 5 percent of the map

unit

Management Considerations

Soil-related factors: thermokarst, frost action, excess slope

145—Minto-Chatanika complex, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 35 to 50 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex

Slope range: 0 to 3 percent Parent material: loess

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: low

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; grayish brown slightly decomposed plant material, high permeability

A—5 to 9 inches; dark brown silt loam, moderately high permeability

Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability

C—16 to 72 inches; light olive brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 35 to 50 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes

Slope shape: linear, concave Slope range: 0 to 3 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability

A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability

Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Chatanika, slopes more than 3 percent, and similar

soils: 2 to 10 percent of the map unit

Goldstream and similar soils: 2 to 10 percent of the

map unit

Minto, slopes more than 3 percent, and similar soils:

2 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

146—Minto-Chatanika complex, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex

Slope range: 3 to 7 percent

Parent material: loess

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches *Ponding:* none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; light olive brown slightly decomposed plant material, high permeability

A—5 to 9 inches; grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability

C—16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes

Slope shape: linear, concave Slope range: 3 to 7 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability

Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto, slopes less than 3 percent, and similar soils: 5 to 10 percent of the map unit

Minto, slopes more than 7 percent, and similar soils: 5 to 10 percent of the map unit

Saulich and similar soils: 0 to 10 percent of the map

Chatanika, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Chatanika, slopes more than 7 percent, and similar soils: 0 to 5 percent of the map unit

Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

147—Minto-Chatanika complex, 7 to 12 percent slopes

Elevation: 397 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex

Slope range: 7 to 12 percent Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; dark brown slightly decomposed plant material, high permeability

A—5 to 9 inches; very dark grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; grayish brown silt loam, moderately high permeability

C—16 to 72 inches; light olive brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth

below the soil profile.

Chatanika and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes

Slope shape: linear, concave Slope range: 7 to 12 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability

Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto, slopes more than 12 percent, and similar soils: 5 to 15 percent of the map unit

Chatanika, slopes less than 7 percent, and similar soils: 2 to 10 percent of the map unit

Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

148—Minto-Chatanika complex, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex

Slope range: 12 to 20 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water—severe; by wind—severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high permeability

A—5 to 9 inches; grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; light olive brown silt loam, moderately high permeability

C—16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes

Slope shape: linear, concave Slope range: 12 to 20 percent

Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May-

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability

A-4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability

Cfg-21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Minto, slopes more than 20 percent, and similar soils: 5 to 15 percent of the map unit

Chatanika, slopes less than 12 percent, and similar soils: 2 to 10 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, excess slope

149—Mosquito mucky peat

Elevation: 397 to 951 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Mosquito and Similar Soils

Extent: 70 to 90 percent of the map unit Landform: depressions on alluvial flats

Slope shape: linear, concave Slope range: 0 to 2 percent

Parent material: organic material over alluvium

Depth to permafrost: 14 to 31 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 4.1 inches

Vegetation: black spruce and tamarack woodland Representative Profile:

Oi-0 to 18 inches; dark grayish brown peat, high permeability

Cg-18 to 24 inches; black very fine sandy loam, moderately high permeability

Cfg-24 to 72 inches; dark gravish brown permanently frozen material, impermeable

Minor Components

Bolio and similar soils: 0 to 10 percent of the map

Bradway and similar soils: 0 to 10 percent of the map unit

Liscum and similar soils: 0 to 5 percent of the map

unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

150—Mosquito-Noonku complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Mosquito and Similar Soils

Extent: 30 to 50 percent of the map unit Landform: depressions on alluvial flats

Slope shape: linear, concave Slope range: 0 to 2 percent

Parent material: organic material over alluvium

Depth to permafrost: 14 to 31 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 4.1 inches

Representative Profile:

Oi—0 to 18 inches; black peat, high permeability Cq—18 to 24 inches; dark gravish brown very fine sandy loam, moderately high permeability Cfg—24 to 72 inches; black permanently frozen

material, impermeable

Noonku and Similar Soils

Extent: 30 to 50 percent of the map unit

Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub

Representative Profile:

Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high permeability

A—2 to 6 inches; dark brown silt loam, moderately high permeability

Cg1—6 to 47 inches; gray stratified sand to fine sand to very fine sandy loam, moderately high permeability

2Cg2—47 to 72 inches; very dark brown very gravelly sand, high permeability

Minor Components

Bradway and similar soils: 0 to 10 percent of the map unit

North Pole and similar soils: 0 to 10 percent of the map unit

Tanana and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

151—Noonku very fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Noonku and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: sloughs

Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May-

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub

Representative Profile:

Oe—0 to 2 inches; dark brown moderately decomposed plant material, moderately high permeability

A—2 to 6 inches; very dark brown silt loam, moderately high permeability

Cg1—6 to 47 inches; gray stratified sand to fine sand to very fine sandy loam, moderately high permeability

2Cg2—47 to 72 inches; dark brown very gravelly sand, high permeability

Minor Components

Liscum and similar soils: 0 to 5 percent of the map

North Pole and similar soils: 0 to 10 percent of the map unit

Tanacross and similar soils: 0 to 5 percent of the map unit

Tanana and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

152—North Pole fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

North Pole and Similar Soils

Extent: 75 to 90 percent of the map unit

Landform: alluvial flats Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 8.2 inches Vegetation: black spruce and tamarack woodland

Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability

Oa—2 to 4 inches; grayish brown highly decomposed plant material, moderately low permeability

Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high permeability

2C—39 to 72 inches; dark yellowish brown and dark gray very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Tanana and similar soils: 0 to 10 percent of the map

Mosquito and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Eielson and similar soils: 0 to 5 percent of the map

Liscum and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

153—North Pole-Mosquito-Liscum complex

Elevation: 397 to 1,201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

North Pole and Similar Soils

Extent: 20 to 55 percent of the map unit

Landform: alluvial flats

Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 8.2 inches Vegetation: black spruce and tamarack woodland Representative Profile:

Oi—0 to 2 inches; dark yellowish brown and dark gray slightly decomposed plant material, high permeability

Oa—2 to 4 inches; black highly decomposed plant material, moderately low permeability

Bg—4 to 39 inches; dark brown stratified fine sand to silt loam, moderately high permeability

2C—39 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Mosquito and Similar Soils

Extent: 20 to 40 percent of the map unit Landform: depressions on alluvial flats

Slope shape: linear, concave Slope range: 0 to 2 percent

Parent material: organic material over alluvium

Depth to permafrost: 14 to 31 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 4.1 inches Vegetation: black spruce and tamarack woodland

Representative Profile:
Oi—0 to 18 inches; black peat, high permeability

Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high permeability Cfg—24 to 72 inches; black permanently frozen

material, impermeable

Liscum and Similar Soils

Extent: 15 to 25 percent of the map unit

Landform: alluvial flats Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: negligible

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 4 inches

Ponding: frequent

Available water capacity (approximate): 11.9 inches

Vegetation: sedges and grasses

Representative Profile:

Oi—0 to 3 inches; olive brown and gray peat, high permeability

Oa—3 to 11 inches; olive brown muck, moderately low permeability

A—11 to 15 inches; very dark grayish brown mucky silt loam, moderately high permeability

Bg—15 to 70 inches; black stratified silt loam to loamy fine sand, moderately high permeability

C—70 to 72 inches; dark brown gravelly sandy loam, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Histels and similar soils: 0 to 10 percent of the map unit

Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action, permafrost

154—North Pole-Noonku complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

North Pole and Similar Soils

Extent: 50 to 65 percent of the map unit

Landform: alluvial flats Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.-0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 8.2 inches Vegetation: black spruce and tamarack woodland

Representative Profile:

Oi—0 to 2 inches; grayish brown slightly decomposed plant material, high permeability

Oa—2 to 4 inches; dark yellowish brown and dark gray highly decomposed plant material, moderately low permeability

Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high permeability

2C—39 to 72 inches; dark brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Noonku and Similar Soils

Extent: 15 to 35 percent of the map unit

Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub Representative Profile:

Oe—0 to 2 inches; gray moderately decomposed plant material, moderately high permeability

A—2 to 6 inches; dark brown silt loam, moderately high permeability

Cg1—6 to 47 inches; very dark brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2Cg2—47 to 72 inches; gray very gravelly sand, high permeability

Minor Components

Bradway and similar soils: 0 to 10 percent of the map unit

Eielson and similar soils: 0 to 5 percent of the map

Piledriver and similar soils: 0 to 5 percent of the map

Tanana and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

155—Peede silt loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Peede and Similar Soils

Extent: 60 to 90 percent of the map unit Landform: depressions on flood plains

Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 14.6 inches

Vegetation: grasses and sedges

Representative Profile:

Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high

permeability

Cg—2 to 72 inches; dark gray silt loam, moderately high permeability

Minor Components

Mosquito and similar soils: 5 to 25 percent of the map unit

Liscum and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

156—Peede-Mosquito complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Peede and Similar Soils

Extent: 60 to 80 percent of the map unit Landform: depressions on flood plains

Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 14.6 inches

Vegetation: grasses and sedges

Representative Profile:

Oe—0 to 2 inches; dark gray moderately decomposed plant material, moderately high permeability

Cg—2 to 72 inches; very dark brown silt loam, moderately high permeability

Mosquito and Similar Soils

Extent: 20 to 30 percent of the map unit Landform: depressions on alluvial flats

Slope shape: linear, concave Slope range: 0 to 2 percent

Parent material: organic material over alluvium

Depth to permafrost: 14 to 31 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 4.1 inches Vegetation: black spruce and tamarack woodland

Representative Profile:

Oi—0 to 18 inches; dark grayish brown peat, high permeability

Cg—18 to 24 inches; black very fine sandy loam, moderately high permeability

Cfg-24 to 72 inches; dark grayish brown

permanently frozen material, impermeable

Minor Components

Liscum and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permafrost, frost action

157—Piledriver very fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Piledriver and Similar Soils

Extent: 70 to 90 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: rare

Depth to high water table (approximate): April-May-

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability

C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability

C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 5 to 15 percent of the map unit

Fubar and similar soils: 5 to 10 percent of the map

uni

Tanana and similar soils: 0 to 5 percent of the map

uni

North Pole and similar soils: 0 to 5 percent of the

map unit

Management Considerations

Soil-related factors: water table, permeability, flooding

158—Piledriver-Eielson complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Piledriver and Similar Soils

Extent: 45 to 60 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

C1—3 to 15 inches; dark olive brown very fine sandy loam, moderately high permeability

C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Eielson and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: flood plains

Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi-0 to 2 inches; very dark brown slightly decomposed plant material, high permeability

O/C-2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability

C1—49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability

2C2—71 to 72 inches; very dark brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Fubar and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 10 percent of the map unit

Riverwash: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

159—Piledriver-Fubar complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Piledriver and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability

C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability

C2-15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Fubar and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: moderately well drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—54 inches

Ponding: none

Available water capacity (approximate): 3.4 inches Vegetation: white spruce, balsam poplar, and paper birch forest

Representative Profile:

Oi-0 to 2 inches; dark brown slightly

decomposed plant material, high permeability C1-2 to 10 inches; dark grayish brown stratified fine sand to silt loam, moderately high

permeability

2C2—10 to 72 inches; dark gray very gravelly coarse sand, high permeability

Note: This soil has 1 to 10 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permeability, sand and gravel

160—Pits, gravel

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Pits, gravel

Extent: 100 percent of the map unit

Landform: gravel pits

Slope shape: convex, concave, linear

Slope range: 0 to 60 percent

161—Pits, quarry

Elevation: 1,476 to 3,264 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Pits, quarry

Extent: 100 percent of the map unit

Landform: quarries

Slope shape: concave, convex, linear

Slope range: 0 to 100 percent

Vegetation: none, or sparse herbaceous vegetation

and willows

162—Riverwash

Elevation: 397 to 1,640 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 75 to 104 days

Riverwash

Extent: 100 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent

163—Salchaket very fine sandy loam

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Salchaket and Similar Soils

Extent: 80 to 90 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—more than 72 inches

Ponding: frequent

Available water capacity (approximate): 9.7 inches Vegetation: white spruce, balsam poplar, and paper

birch forest

Representative Profile:

Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability

C1—3 to 24 inches; olive brown very fine sandy loam, moderately high permeability

C2-24 to 45 inches; dark grayish brown stratified silt loam to fine sand, moderately high permeability

2C3-45 to 72 inches; variegated very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Jarvis and similar soils: 5 to 10 percent of the map

Tanana and similar soils: 5 to 10 percent of the map

unit

Management Considerations

Soil-related factors: flooding, ponding

164—Salchaket-Typic Cryorthents complex

Elevation: 397 to 1,299 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Salchaket and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: nealigible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—more than 72 inches

Ponding: frequent

Available water capacity (approximate): 9.7 inches Vegetation: white spruce, balsam poplar, and paper birch forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

C1—3 to 24 inches; variegated very fine sandy loam, moderately high permeability

C2—24 to 45 inches; dark grayish brown stratified silt loam to fine sand, moderately high permeability

2C3—45 to 72 inches; olive brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Typic Cryorthents and Similar Soils

Extent: 30 to 40 percent of the map unit

Landform: flood plains, terraces

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: gravelly fill over alluvium Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Vegetation: seeded or planted grasses, shrubs, or trees

Representative Profile:

C—0 to 30 inches; light brownish gray stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high permeability

2C1—30 to 63 inches; light olive brown stratified fine sand to silt loam, high permeability
2C2—63 to 72 inches; light brownish gray very gravelly sand, high permeability

Minor Components

Jarvis and similar soils: 0 to 15 percent of the map

unit

Fubar and similar soils: 0 to 5 percent of the map

unit

Management Considerations

Soil-related factors: high gravel content, flooding, ponding

165—Saulich peat, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 70 to 85 percent of the map unit

Landform: valley sides Slope shape: concave, linear Slope range: 3 to 7 percent

Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss

Representative Profile:

Oi—0 to 16 inches; black and dark brown peat,

high permeability

Bg/A—16 to 21 inches; dark grayish brown

mucky silt loam, moderately high permeability Cfg—21 to 72 inches; very dark brown permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 3 to 10 percent of the map unit

Saulich, slopes less than 3 percent, and similar soils: 3 to 10 percent of the map unit

Saulich, slopes more than 7 percent, and similar soils: 3 to 10 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

166—Saulich peat, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: valley sides Slope shape: concave, linear Slope range: 7 to 12 percent

Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss

Representative Profile:

Oi—0 to 16 inches; very dark brown peat, high permeability

Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high permeability

Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 3 to 10 percent of the map unit

Saulich, slopes less than 7 percent, and similar soils: 3 to 5 percent of the map unit

Saulich, slopes more than 12 percent, and similar soils: 3 to 5 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

167—Saulich peat, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 70 to 85 percent of the map unit

Landform: valley sides Slope shape: concave, linear Slope range: 12 to 20 percent

Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by

nazaru or erosiori (organic macremoveu). by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss

Representative Profile:

Oi—0 to 16 inches; very dark brown peat, high permeability

Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high permeability

Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minor Components

Ester and similar soils: 0 to 7 percent of the map unit Goldstream and similar soils: 5 to 10 percent of the map unit

Saulich, slopes less than 12 percent, and similar soils: 5 to 10 percent of the map unit

Saulich, slopes more than 20 percent, and similar soils: 5 to 10 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

168—Saulich-Minto complex, 3 to 12 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 30 to 45 percent of the map unit

Landform: valley sides Slope shape: concave, linear Slope range: 3 to 12 percent

Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss

Representative Profile:

Oi-0 to 16 inches; dark grayish brown peat, high permeability

Bg/A—16 to 21 inches; black and dark brown mucky silt loam, moderately high permeability

Cfg-21 to 72 inches; very dark brown permanently frozen material, impermeable

Minto and Similar Soils

Extent: 30 to 45 percent of the map unit

Landform: hills

Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex

Slope range: 3 to 12 percent Parent material: loess

Hazard of erosion (organic mat removed): by

water—severe; by wind—severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May— 4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi-0 to 5 inches; dark brown slightly decomposed plant material, high permeability

A-5 to 9 inches; light olive brown silt loam, moderately high permeability

Bw-9 to 16 inches; very dark gravish brown silt loam, moderately high permeability

C-16 to 72 inches; grayish brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Minto, slopes more than 12 percent, and similar soils: 2 to 10 percent of the map unit

Saulich, slopes less than 7 percent, and similar soils: 2 to 10 percent of the map unit

Minto, slopes less than 7 percent, and similar soils: 2 to 7 percent of the map unit

Saulich, slopes more than 12 percent, and similar

soils: 2 to 7 percent of the map unit

Chatanika and similar soils: 0 to 10 percent of the map unit

Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

169—Saulich-Minto complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 30 to 45 percent of the map unit

Landform: valley sides Slope shape: concave, linear Slope range: 12 to 20 percent

Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss

Representative Profile:

Oi-0 to 16 inches; very dark brown peat, high permeability

Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high permeability Cfg-21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minto and Similar Soils

Extent: 30 to 45 percent of the map unit

Landform: hills

Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex Slope range: 12 to 20 percent

Parent material: loess

Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: moderately well drained

Flooding: none

Depth to high water table (approximate): April-May— 4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

Oi—0 to 5 inches; light olive brown slightly decomposed plant material, high permeability

A-5 to 9 inches; dark brown silt loam, moderately high permeability

Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability

C—16 to 72 inches; grayish brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Minto, slopes less than 12 percent, and similar soils:

0 to 7 percent of the map unit

Minto, slopes more than 20 percent, and similar

soils: 0 to 7 percent of the map unit

Saulich, slopes more than 20 percent, and similar

soils: 0 to 7 percent of the map unit

Chatanika and similar soils: 0 to 7 percent of the

map unit

Saulich, slopes less than 12 percent, and similar

soils: 0 to 7 percent of the map unit

Ester and similar soils: 0 to 5 percent of the map unit Goldstream and similar soils: 0 to 5 percent of the

map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

170—Steese silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 75 to 85 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex, linear Slope range: 3 to 7 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest

Representative Profile:

Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high permeability

A—2 to 5 inches; brown silt loam, moderately high permeability

Bw—5 to 27 inches; dark brown silt loam, moderately high permeability

2C—27 to 33 inches; light olive brown very channery silt loam, high permeability

2Cr—33 to 72 inches; light olive brown weathered bedrock

Minor Components

Steese, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks and similar soils: 2 to 10 percent of the map unit

Gilmore and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: bedrock

171—Steese silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 70 to 80 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex, linear Slope range: 7 to 12 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; dark brown silt loam, moderately high permeability

Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes more than 12 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks and similar soils: 2 to 10 percent of the

map unit

Gilmore and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

172—Steese silt loam, 12 to 20 percent slopes

Elevation: 499 to 2.799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 60 to 75 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex, linear Slope range: 12 to 20 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; dark brown silt loam, moderately high permeability

Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes more than 20 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks and similar soils: 2 to 10 percent of the map unit

Gilmore and similar soils: 2 to 10 percent of the map

Steese, slopes less than 12 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock substratum

173—Steese silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 70 to 85 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex, linear Slope range: 20 to 30 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches

Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability

A—2 to 5 inches; brown silt loam, moderately high permeability

Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability

2C—27 to 33 inches; dark brown very channery silt loam, high permeability

2Cr—33 to 72 inches; dark brown weathered bedrock

Minor Components

Steese, slopes more than 30 percent, and similar soils: 2 to 10 percent of the map unit

Gilmore and similar soils: 2 to 10 percent of the map

Steese, slopes less than 20 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks and similar soils: 2 to 10 percent of the map unit

Ester and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

174—Steese silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 80 to 95 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex, linear Slope range: 30 to 45 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; dark brown silt loam, moderately high permeability

Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes less than 30 percent, and similar soils: 5 to 15 percent of the map unit Gilmore and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

175—Steese silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 85 to 95 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: linear, convex Slope range: 45 to 70 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches

Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; dark brown silt loam, moderately high permeability

Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Gilmore and similar soils: 0 to 10 percent of the map unit

Steese, slopes less than 45 percent, and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

176—Steese-Gilmore complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex, linear Slope range: 12 to 20 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; light olive brown silt loam, moderately high permeability

Bw—5 to 27 inches; dark brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr—33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 20 to 40 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 12 to 20 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

A—3 to 6 inches; olive brown silt loam, moderately high permeability

Bw—6 to 12 inches; yellowish brown silt loam, moderately high permeability

2BC—12 to 19 inches; dark brown very channery silt loam, high permeability

2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 12 percent, and similar soils: 5 to 15 percent of the map unit Steese, slopes more than 20 percent, and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

177—Steese-Gilmore complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex, linear Slope range: 20 to 30 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; dark brown silt loam, moderately high permeability

Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr—33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 30 to 50 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 20 to 30 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; olive brown slightly decomposed plant material, high permeability

A—3 to 6 inches; dark brown silt loam, moderately high permeability

Bw—6 to 12 inches; yellowish brown silt loam, moderately high permeability

2BC—12 to 19 inches; olive brown very channery silt loam, high permeability

2Cr—19 to 72 inches; olive brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 20 percent, and similar soils: 2 to 15 percent of the map unit Steese, slopes less than 20 percent, and similar soils: 2 to 12 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

178—Steese-Gilmore complex, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex, linear Slope range: 30 to 45 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability

A—2 to 5 inches; light olive brown silt loam, moderately high permeability

Bw—5 to 27 inches; dark brown silt loam, moderately high permeability

2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr-33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 30 to 50 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 30 to 45 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability

A—3 to 6 inches; yellowish brown silt loam, moderately high permeability

Bw—6 to 12 inches; olive brown silt loam, moderately high permeability

2BC—12 to 19 inches; dark brown very channery silt loam, high permeability

2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 30 percent, and similar

soils: 5 to 15 percent of the map unit

Steese, slopes more than 45 percent, and similar

soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

179—Steese-Gilmore complex, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 40 to 60 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex, linear Slope range: 45 to 70 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by

water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking

aspen forest

Representative Profile:

Oi-0 to 2 inches; light olive brown slightly decomposed plant material, high permeability

A-2 to 5 inches; brown silt loam, moderately high permeability

Bw-5 to 27 inches; dark brown silt loam,

moderately high permeability

2C-27 to 33 inches; light olive brown very channery silt loam, high permeability

2Cr-33 to 72 inches; light olive brown weathered bedrock

Gilmore and Similar Soils

Extent: 40 to 60 percent of the map unit

Landform: hills

Position on slope: summits, backslopes

Slope shape: linear, convex Slope range: 45 to 70 percent

Parent material: loess over residuum weathered

from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking

aspen, and white spruce forest

Representative Profile:

Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability

A-3 to 6 inches; yellowish brown silt loam, moderately high permeability

Bw-6 to 12 inches: olive brown silt loam.

moderately high permeability

2BC-12 to 19 inches; dark brown very channery

silt loam, high permeability

2Cr—19 to 72 inches; dark brown weathered

bedrock, high permeability

Minor Components

Gilmore, slopes less than 45 percent, and similar

soils: 2 to 10 percent of the map unit

Steese, slopes less than 45 percent, and similar

soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

180—Tanacross peat

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Tanacross and Similar Soils

Extent: 85 to 95 percent of the map unit

Landform: alluvial flats Slope shape: linear Slope range: 0 to 2 percent

Parent material: organic material over alluvium

Depth to permafrost: 10 to 28 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 3.0 inches

Vegetation: black spruce woodland

Representative Profile:

Oi—0 to 9 inches; dark brown peat, high permeability

A—9 to 11 inches; dark gray and dark yellowish brown mucky silt loam, moderately high permeability

Bjjg—11 to 17 inches; black stratified fine sandy loam to silt loam, moderately high permeability

Bjjfg—17 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Tanana and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

181—Tanana mucky silt loam

Elevation: 397 to 951 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Tanana and Similar Soils

Extent: 60 to 85 percent of the map unit

Landform: terraces Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium and/or loess over alluvium

Depth to permafrost: 16 to 47 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May—

0 inches; June-Sept.—6 to 12 inches

Ponding: frequent

Available water capacity (approximate): 5.2 inches

Vegetation: black spruce forest

Representative Profile:

Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability

Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Bolio and similar soils: 0 to 5 percent of the map unit Jarvis and similar soils: 2 to 5 percent of the map unit

Noonku and similar soils: 3 to 5 percent of the map unit

Salchaket and similar soils: 5 to 10 percent of the map unit

Tanacross and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, flooding, frost action

182—Tanana-Mosquito complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Tanana and Similar Soils

Extent: 50 to 70 percent of the map unit

Landform: terraces Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium and/or loess over alluvium

Depth to permafrost: 16 to 47 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—6 to 12 inches

Ponding: frequent

Available water capacity (approximate): 5.2 inches

Vegetation: black spruce forest

Representative Profile:

Oi-0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability A-3 to 6 inches; very dark grayish brown mucky

silt loam, moderately high permeability

Bjig—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability

Cjjfg-25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Mosquito and Similar Soils

Extent: 20 to 25 percent of the map unit Landform: depressions on alluvial flats

Slope shape: linear, concave Slope range: 0 to 2 percent

Parent material: organic material over alluvium

Depth to permafrost: 14 to 31 inches

Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: high

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 4.1 inches Vegetation: black spruce and tamarack woodland Representative Profile:

Oi—0 to 18 inches; black peat, high permeability Cg-18 to 24 inches; dark gravish brown verv fine sandy loam, moderately high permeability Cfg—24 to 72 inches; black permanently frozen

material, impermeable

Minor Components

Jarvis and similar soils: 5 to 15 percent of the map

Liscum and similar soils: 0 to 5 percent of the map

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permafrost, frost action

183—Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils

Elevation: 397 to 1.201 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Typic Cryaquents and Similar Soils

Extent: 0 to 90 percent of the map unit Landform: depressions on terraces

Slope shape: concave Slope range: 0 to 5 percent

Parent material: lacustrine silt or loess Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: low

Drainage class: poorly drained

Flooding: frequent

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 13.9 inches

Vegetation: sedges, grasses, and low shrubs

Representative Profile:

Oe—0 to 6 inches; dark yellowish brown moderately decomposed plant material, moderately high permeability

Ca—6 to 72 inches: dark grav and dark gravish brown silt loam, moderately high permeability

Histic Cryaquepts and Similar Soils

Extent: 20 to 50 percent of the map unit

Landform: depressions on terraces

Slope shape: concave Slope range: 0 to 3 percent

Parent material: organic material over loess Hazard of erosion (organic mat removed): by

water-slight; by wind-slight

Runoff: negligible

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May-

0 inches; June-Sept.—0 to 16 inches

Ponding: frequent

Available water capacity (approximate): 11.8 inches

Vegetation: sedges, grasses, and low shrubs Representative Profile:

Oa—0 to 13 inches; dark grayish brown muck, high permeability

C—13 to 30 inches; olive brown silt loam, moderately high permeability

Cg-30 to 72 inches; very dark brown silt loam, moderately high permeability

Terric Cryofibrists and Similar Soils

Extent: 0 to 80 percent of the map unit Landform: thermokarst depressions

Slope shape: concave Slope range: 0 to 1 percent

Parent material: organic material over lacustrine

deposits and/or loess

Hazard of erosion (organic mat removed): by

water—slight; by wind—slight

Runoff: negligible

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—0 inches Ponding: frequent

Available water capacity (approximate): 15.0 inches

Vegetation: sedges Representative Profile:

Oi-0 to 28 inches; black peat, high permeability

Oa-28 to 40 inches; very dark brown muck,

moderately low permeability

Ca-40 to 72 inches; black silty clay loam, moderately high permeability

Minor Components

Histels and similar soils: 0 to 50 percent of the map

unit

Water: 0 to 20 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

184—Typic Cryorthents, pit spoil

Elevation: 397 to 1,299 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Typic Cryorthents and Similar Soils

Extent: 75 to 95 percent of the map unit

Landform: flood plains, terraces

Slope shape: linear

Slope range: 0 to 7 percent

Parent material: mine spoil over alluvium Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 10.9 inches Vegetation: paper birch and balsam poplar forest

and alder scrub Representative Profile:

> Oi—0 to 1 inch; light olive brown mottled slightly decomposed plant material, high permeability

C1—1 to 49 inches; dark brown stratified fine sand to silt loam, moderately high

permeability

2C2—49 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil occurs on highly irregular topography consisting of small (3 to 15 feet), man-made hills with steep slopes.

Minor Components

Fubar and similar soils: 0 to 10 percent of the map

Jarvis and similar soils: 0 to 10 percent of the map unit

Piledriver and similar soils: 0 to 10 percent of the map unit

Salchaket and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope

185—Typic Cryorthents-Urban land complex

Elevation: 397 to 1,299 feet

Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Typic Cryorthents, fill, and Similar Soils

Extent: 40 to 60 percent of the map unit

Landform: flood plains, terraces

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: gravelly fill over alluvium Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 7.7 inches Vegetation: seeded or planted grasses, shrubs, or trees

Representative Profile:

C—0 to 30 inches; light brownish gray stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high permeability

2C1—30 to 63 inches; light olive brown stratified fine sand to silt loam, high permeability 2C2—63 to 72 inches; light brownish gray very

gravelly sand, high permeability

Urban land

Extent: 30 to 60 percent of the map unit

Landform: urban land Slope shape: convex, linear Slope range: 0 to 2 percent

Note: Urban land is mostly covered by streets, parking lots, buildings, and other structures of

urban areas.

Minor Components

Salchaket and similar soils: 0 to 15 percent of the map unit

Jarvis and similar soils: 0 to 10 percent of the map unit

Fubar and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: high gravel content, permeability, flooding

186—Urban land

Elevation: 397 to 853 feet

Mean annual precipitation: 10 to 14 inches

Urban land

Extent: 100 percent of the map unit

Landform: urban land Slope shape: convex, linear Slope range: 0 to 2 percent

Note: Urban land is mostly covered by streets, parking lots, buildings, and other structures of

urban areas.

187—Water

Water

Extent: 100 percent of the map unit

Landform: lakes

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Tables 5 and 6 give the engineering index properties and particle size data for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the USDA. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Table 5 shows the engineering classifications and the range of index properties for the layers of

each soil in the survey area.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle size distribution of the fraction less than 3 inches (75 mm) in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SP-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches (75 mm) in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Table 6 gives particle size data for each soil in the survey area.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches (75 mm) in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. The estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. The estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 7 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $\frac{1}{3}$ or $\frac{1}{10}$ -bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability refers to the ability of a soil to transmit water or air. The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at ¹/₃- or ¹/₁₀-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 7, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 7 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soils are grouped according to the amount of stable aggregates more than 0.84 millimeter in size. Soils containing rock fragments can occur in any group. The groups are as follows:

- 1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 25 to 39 percent dry soil aggregates with > 35 percent clay or > 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
- 40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
- 6. 45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
- 50 percent or more dry soil aggregates.
 These soils are very slightly erodible. Crops can easily be grown.
- 8. Stony, gravelly, or wet soils and other soils not subject to wind erosion.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 8 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are

based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It

is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Water Features

Table 9 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward

movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and frequency are estimated. Duration is expressed as extremely brief if 0.1 hour to 4 hours, very brief if 4 hours to 2 days, brief if 2 to 7 days, long if 7 to 30 days, and very long if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. None means that flooding is not probable; very rare that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); rare that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); occasional that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); frequent that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and very frequent that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods is also considered. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone

areas at specific flood frequency levels.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 9 indicates surface water depth and the duration and frequency of ponding. Duration is expressed as very brief if less than 2 days, brief if 2 to 7 days, long if 7 to 30 days, and very long if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. None means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); occasional that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and frequent that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Moisture status indicates the water content in the soil at a specified depth. The Status is expressed as wet, moist, or dry. Wet refers to soil in which most of the pore space is filled with water and the water is retained at less than 0.00001 bar suction. Moist refers to soil in which some of the pore space is filled with water and the water is retained at between 0.00001 and 15 bar suction. Dry refers to soil with little to no water in the pore spaces. Any water is retained at greater than 15 bar suction, which is generally near or above the wilting point of common agricultural crops. Frozen is used to indicate that the temperature of the soil layer is below the freezing point of water.

Soil Features

Table 10 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness of the restrictive layer which significantly affects the ease of excavation.

Depth to top is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or

of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clavey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures. Potential for frost action is expressed as low, moderate, or high.

Risk of corrosion pertains to potential soilinduced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture. moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Use and Management of the Soil

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, foresters, botanists, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, permafrost, or unstable soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, and trails.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. The soils in each capability class or subclass is shown in table 11. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk

of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only capability class and subclass are presented for soils in Alaska.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use. There are no Class 1 soils in Alaska due to the climate.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, 2e. The letter e shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. Other tables indicate the suitability of the soils for use as source materials. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are not limited, somewhat limited, and very limited. The suitability ratings are expressed as source, probable source, and improbable source or as good, fair, and poor. In some tables, slight, moderate, and severe are used to describe the degree to which certain soil features or site characteristics result in limitations that affect a specified use of the soil.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. The numerical ratings, as they relate to each specific interpretation, are explained in the sections

that follow.

Forest Productivity

In table 12, the potential productivity of common trees on a soil is expressed as a site index. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. The site index is determined from height and age measurements of selected trees from stands throughout the survey area and in nearby areas with similar soils and climate. Tables and equations for determining site index are given in the appropriate publication for each major tree species (Farr, 1967; Gregory and Haack, 1965; Quenet and Manning, 1990). Site index should be used as a comparative index between soils and an approximate measure of height growth, not an absolute or expected value. The most rapid tree growth and greatest yields of a particular tree species can be expected on soils with the highest site indices.

The volume of wood fiber, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forest Management

In table 13, interpretive ratings are given for various aspects of forest management. The ratings are both verbal and numerical.

Ratings in the column hazard of off-road or off-trail erosion are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of slight indicates that erosion is unlikely under ordinary climatic conditions; moderate indicates that some erosion is likely and that erosion-control measures may be needed; severe indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and very

severe indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column hazard of erosion on roads and trails are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of slight indicates that little or no erosion is likely; moderate indicates that some erosion is likely, that the roads or trails may require occasional maintenance; and that simple erosion-control measures are needed; and severe indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column suitability for roads (natural surface) are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Engineering

This section provides information for planning land uses related to building sites. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, and construction materials. The ratings are based on observed performance of the soils and on the estimates given under the heading Soil Properties.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet (1.5 to 2.1 m). Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the

information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet (1.5 to 2.1 m) of the surface, soil wetness, depth to water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 14 and 15 show the degree and kind of soil limitations that affect structures and site improvements, including dwellings with and without basements, small commercial buildings, local roads and streets, and shallow excavations.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited*

indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is not limited (value = 0.00), no entry appears for the numerical value.

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet (2.1 m). The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load

without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrinkswell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet (1.5 or 1.8 m) for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Tables 16 and 17 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates

that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 4 and 6 feet (1.2 and 1.8 m) is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet (1.2 m) below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth

to bedrock, permafrost, or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches (5 cm) per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches (102 cm), if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A trench sanitary landfill is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet (0.6 m) thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock, permafrost, or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet (1.8 m). For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet

are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an area sanitary landfill, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet (0.6 m) thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock, permafrost, or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick

enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 18 and 19 give information about the soils as potential sources of gravel, sand, topsoil, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

In table 18 the soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 18, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

In table 19 the soils are rated good, fair, or poor as potential sources of topsoil, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil or roadfill. The lower the number, the greater the limitation. Only material in suitable quantity is evaluated.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches (102 cm) of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the

material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. Rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material affect the ease of excavating, loading and spreading. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet (1.8 m) high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet (1.5 m). It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties affecting the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. Large stones, depth to a water table, and slope affect the ease of excavation. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential). Susceptibility to frost action is also considered. The soils are rated based on the most limiting layers. Often a soil will have finer textured upper layers that are affected by frost action, while coarser textured lower layers in the same soil may not be affected.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that

have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in *Soil Taxonomy* (Soil Survey Staff, 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff, 1998) and in the *Soil Survey Manual* (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in *Field Indicators of Hydric Soils in the United States* (Hurt and others, 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 cm). This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in table 20. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1998).

Some map units consist almost entirely of hydric soils, such as map unit 101—Bolio peat (in which all listed components are hydric). Other map units consist primarily of nonhydric soils, such as map unit 118—Fairbanks silt loam, 12 to 20 percent slopes, (in which all listed components are nonhydric), or map unit 162—Salchaket fine sandy loam (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils in table 20.

Table 20 also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

Key To Hydric Soil Criteria

- 1. All Histosols except Folists, or
- 2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or cumulic subgroups that are:
- a. somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more

than 2 weeks) during the growing season, or

- b. poorly drained or very poorly drained and have either:
- (1) a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or for other soils
- (2) a frequently occurring water table at less than 1.0 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 inches/hour in all layers within a depth of 20 inches,
- (3) a frequently occurring water table at less than 1.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 inches/hour in any layer within a depth of 20 inches, or
- 3. Soils that are frequently ponded for a long duration or a very long duration during the growing season, or
- 4. Soils that are frequently flooded for a long duration or a very long duration during the growing season.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1998 and 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 21 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is *Inceptisol*.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is *Cryept* (*cry*, meaning cold, plus *ept*, from *Inceptisol*).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is *Eutrocryepts* (*Eutro* meaning high base saturation, plus *ochrept*, the cold suborder of the *Inceptisols*).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of

the great group. The adjective *typic* identifies the subgroup that typifies the great group. An example is *Typic Eutrocryepts*.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is *coarse-silty, mixed, superactive, Typic Eutrocryepts*.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example from this survey area is the Fairbanks Series.

Taxonomic Units and Their Morphology

In this section, the taxonomic units recognized in the survey area are described. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small threedimensional area of soil, that is typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the Soil Survey Manual (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in Soil Taxonomy (Soil Survey Staff, 1999) and in Keys to Soil Taxonomy (Soil Survey Staff, 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the taxonomic unit.

Bolio Series

Taxonomic Classification

Euic, subgelic Typic Hemistels

Setting

Depth class: shallow or moderately deep over

permafrost

Drainage class: very poorly drained

Landform: alluvial terraces
Parent material: organic matter

Slope: 0 to 2 percent

Elevation: 420 to 950 feet (128 to 290 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 101—Bolio peat Location in survey area: NW¼, NW¼, Section 34, T1N, R1W, Fairbanks Meridian

Typical Pedon

Bolio peat—on a level slope at 450 feet (137 m) elevation, under dwarf birch scrub and sedge vegetation:

Oi—0 to 12 inches (0 to 30 cm); very dark brown (10YR 2/2) peat; many very fine to coarse roots; very strongly acid (pH 4.8); diffuse smooth boundary.

Oe—12 to 16 inches (30 to 40 cm); black (10YR 2/1) mucky peat; few very fine and fine roots; moderately acid (pH 5.6); diffuse smooth boundary.

Oef1—16 to 22 inches (40 to 55 cm); black (10YR 2/1) permanently frozen mucky peat; moderately acid (pH 5.6); clear smooth boundary.

Oef2—22 to 60 inches (55 to 152 cm); dark brown (10YR 3/3) permanently frozen mucky peat; moderately acid (pH 5.8).

Range in Characteristics

Organic layer thickness: greater than 40 inches (> 102 cm)

Depth to permafrost: 14 to 28 inches (36 to 71 cm)

Oi horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 2 to 6

Reaction—extremely acid to neutral

Oe horizon:

Color—hue from 5YR to 10YR; value of 2 or 3; chroma of 1 or 2

Reaction—extremely acid to moderately acid

Oef horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2

Texture—hemic peat or stratified hemic and sapric peat

Reaction—moderately or slightly acid

Cfg horizon (when present):

Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma of 1 or 2

Texture—silt loam, mucky silt loam, or peaty silty clay loam

Reaction—moderately acid to neutral

Bradway Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: shallow or moderately deep over permafrost

Drainage class: poorly drained Landform: flood plains and terraces

Parent material: alluvium or loess over alluvium

Slope: 0 to 2 percent

Elevation: 497 to 650 feet (151 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 102—Bradway very fine sandy loam

Location in survey area: SW¼, NW¼, Section 30, T1S, R1E, Fairbanks Meridian

Typical Pedon

- Bradway very fine sandy loam—on a level slope at 400 feet (122 m) elevation under birch shrub vegetation:
- Oi—0 to 4 inches (0 to 10 cm); dark brown (7.5YR 3/2) mat of roots and slightly decomposed plant material; very strongly acid (pH 4.6); clear smooth boundary.
- Oe—4 to 7 inches (10 to 18 cm); black (10YR 2/1) moderately decomposed plant material; strongly acid (pH 5.2); abrupt smooth boundary.
- A—7 to 10 inches (18 to 25 cm); dark grayish brown (10YR 4/2) very fine sandy loam; weak thin platy structure; very friable, nonsticky and nonplastic; common fine roots; strongly acid (pH 5.4); clear wavy boundary.
- Cg—10 to 26 inches (25 to 66 cm); gray (2.5Y 5/1) stratified very fine sandy loam and silt loam; moderately thin platy structure; very friable, nonsticky and nonplastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; few roots; moderately acid (pH 5.6); clear wavy boundary.
- Cfg—26 to 60 inches (66 to 152 cm); gray (N 5/) permanently frozen stratified very fine sandy loam and silt loam; massive; very firm; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; slightly acid (pH 6.2).

Range in Characteristics

Organic layer thickness: 2 to 7 inches (5 to 17 cm) Depth to permafrost: 10 to 28 inches (25 to 71 cm)

O horizons:

Color—hue of 5YR, 7.5YR, or 10YR; value from 2 to 5; chroma from 1 to 6

Texture—slightly or moderately decomposed plant material

Reaction—very strongly to moderately acid

Cg horizon (when present):

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2

Texture—silt loam, very fine sandy loam or stratified very fine sandy loam, and silt loam

Reaction—strongly acid to neutral

Cfg horizon:

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2

Texture—silt loam, very fine sandy loam or stratified very fine sandy loam, and silt loam Reaction—moderately acid to neutral

Brigadier Series

Taxonomic Classification

 Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts

Setting

Depth class: very shallow or shallow over weathered bedrock

Drainage class: well drained Landform: hill crests and slopes

Parent material: loess over weathered schist

bedrock

Slope: 15 to 70 percent

Elevation: 1,001 to 2,799 feet (304 to 851 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 86X—Brigadier and Gilmore, cool silt loams, 15 to 45 percent slopes, Fort Wainwright survey area

Location in survey area: UTM zone 6, 515720E 7161229N

Typical Pedon

- Brigadier silt loam—on a 44 percent slope at 1,700 feet (518 m) elevation, under a black spruce forest:
- Oe—0 to 6 inches (0 to 16 cm); black (7.5YR 2.5/1) moderately decomposed plant material; many very fine to coarse roots; extremely acid (pH 3.8); clear smooth boundary.
- A—6 to 8 inches (16 to 20 cm); black (7.5YR 2.5/1) silt loam; weak medium granular structure; friable, slightly sticky and slightly plastic; few very fine roots; very strongly acid (pH 4.6); abrupt wavy boundary.
- 2Bw—8 to 20 inches (20 to 50 cm); brown (10YR 4/3) extremely channery sandy loam; weak fine subangular blocky structure; very friable; slightly

sticky and slightly plastic; few fine roots; 40 percent channers, 10 percent flags, and 20 percent stones; strongly acid (pH 5.4); gradual smooth boundary.

2Cr—20 to 24 inches (50 to 60 cm); variegated weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 4 to 9 inches (11 to 24 cm)
Depth to unconsolidated bedrock: 10 to 20 inches
(25 to 50 cm) from the mineral soil surface

O horizon:

Color—hue of 5YR or 7.5YR; value from 2 to 4; chroma from 1 to 3

Texture: slightly or moderately decomposed plant material

Reaction—extremely acid or very strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 3

Texture—silt loam or mucky silt loam Reaction—extremely acid to strongly acid

2Bw horizon:

Color—value from 3 to 4; chroma from 3 to 4 Texture—silt loam, loam, or sandy loam Coarse fragment content—35 to 70 percent Reaction—strongly acid or moderately acid

2C horizon (when present):

Color—variegated or hue from 10YR to 5Y; value from 4 to 6; chroma from 3 to 6

Texture—loam, sandy loam, or loamy coarse sand in the fine earth fraction

Coarse fragment content—50 to 90 percent Reaction—strongly acid or moderately acid

Chatanika Series

Taxonomic Classification

 Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: moderately deep over permafrost

Drainage class: poorly drained

Landform: terraces and lower hill slopes Parent material: colluviated silty loess

Slope: 0 to 20 percent

Elevation: 500 to 1,000 feet (152 to 305 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 103—Chatanika mucky silt loam, 0 to 3 percent slopes Location in survey area: UTM zone 6, 495400 m E,

7167350 m N

Typical Pedon

- Chatanika mucky silt loam—on a 1 percent slope at 550 feet (180 m) elevation, under a paper birch and black spruce forest with alder shrubs:
- Oi—0 to 4 inches (0 to 10 cm); very dark grayish brown (10YR 3/2) slightly decomposed moss, leaves, twigs, and other woody debris; common fine and medium roots; very strongly acid (pH 5.0); clear wavy boundary.
- A—4 to 6 inches (10 to 15 cm); very dark grayish brown (10YR 3/2) mucky silt loam; massive; friable, nonsticky and nonplastic; common fine and few medium roots; very strongly acid (pH 5.0); clear irregular boundary.
- Cg/A—6 to 9 inches (15 to 23 cm); grayish brown (2.5Y 5/2) silt loam (Cg) and very dark grayish brown (10YR 3/2) mucky silt loam (A); massive; friable, nonsticky and nonplastic; common fine and few medium roots; strongly acid (pH 5.4); clear irregular boundary.
- Cg—9 to 21 inches (23 to 53 cm); grayish brown (2.5Y 5/2) silt loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine roots; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; few dark brown (10YR 3/3) organic stained material; moderately acid (pH 6.0); clear smooth boundary.
- Cfg—21 to 60 inches (53 to 152 cm); grayish brown (2.5Y 5/2) permanently frozen silt loam; massive; extremely firm; few medium prominent brown (7.5YR 4/4) redoximorphic concentrations, and common medium faint gray (2.5Y 5/1) redoximorphic depletions; moderately acid (pH 6.0).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm) Depth to permafrost: 20 to 40 inches (50 to 102 cm)

O horizon:

Color—hue of 10YR or 7.5YR; value of 2, 2.5, or 3; chroma from 1 to 3

Texture—slightly or moderately decomposed plant material

Reaction—extremely to slightly acid

A horizon:

Color—hue of 10YR or 2.5Y; value from 2 to 4; chroma from 1 to 3

Reaction—very strongly to slightly acid

Cg/A horizon:

Color—Cg material: hue of 10YR or 2.5Y; value from 4 to 6; chroma from 1 to 4—A material: hue of 10YR or 2.5Y; value from 2 to 4; chroma from 1 to 3

Reaction—very strongly to slightly acid

Cg horizon:

Color—hue of 10YR or 2.5Y; value from 4 to 6; chroma from 1 to 4

Texture—silt loam or very fine sandy loam Reaction—moderately acid to neutral

Cfg horizon:

Color—hue of 10YR or 2.5Y; value of 5 or 6; chroma of 1 or 2

Texture—silt loam or very fine sandy loam Reaction—moderately acid to neutral

Chena Series

Taxonomic Classification

Sandy-skeletal, mixed Typic Cryorthents

Setting

Depth class: very deep

Drainage class: excessively drained

Landform: stream terraces Parent material: alluvium Slope range: 0 to 2 percent

Elevation: 400 to 660 feet (122 to 197 m) Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 138—Jarvis-Chena complex

Location in survey area: SE¼, NW¼, Section 15, T3S, R3E, Fairbanks Meridian

Typical Pedon

Chena very fine sandy loam—on a level plain at 545 feet (166 m) elevation, under a paper birch and white spruce forest:

Oi—0 to 4 inches (0 to 10 cm); dark brown (7.5YR 3/2) slightly decomposed forest litter; many very fine to coarse roots; neutral (pH 7.0); abrupt smooth boundary.

C1—4 to 9 inches (10 to 23 cm); olive brown (2.5Y 4/3) very fine sandy loam; massive; very friable, nonsticky and nonplastic; few very fine to coarse roots; common medium prominent brown (7.5YR 5/4) redoximorphic concentrations; moderately acid (pH 6.0); gradual smooth boundary.

2C2—9 to 30 inches (23 to 75 cm); light grayish brown (2.5Y 5/2) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; 40 percent gravel; neutral (pH 7.0); abrupt smooth boundary.

2C3—30 to 72 inches (75 to 183 cm); light olive brown (2.5Y 5/3) very gravelly sand; massive; loose, nonsticky and nonplastic; 40 percent gravel; slightly alkaline (7.4).

Range in Characteristics

Organic layer thickness: 0 to 6 inches (0 to 15 cm) Depth to sand and gravel: 4 to 10 inches (10 to 25 cm)

O horizon:

Color—hue of 5YR or 7.5YR; value of 2 or 3; chroma of 1 or 2

Texture—moderately or slightly decomposed plant material

Reaction—strongly acid to neutral

C horizon (when present):

Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma from 2 to 4

Texture—very fine sandy loam often with strata of fine sandy loam, fine sand, and very fine sand Reaction—moderate or slightly acid

2C horizons:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 2 to 4

Texture—sand, fine sand, loamy sand, or coarse

Gravel content—40 to 85 percent Reaction—slightly acid to slightly alkaline

Eielson Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents

Setting

Depth class: very deep

Drainage class: somewhat poorly drained

Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent

Elevation: 397 to 650 feet (121 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 112—Eielson-Piledriver complex

Location in survey area: NE¼, SW¼, Section 27, T1S, R1W, Fairbanks Meridian

Typical Pedon

Eielson very fine sandy loam—on a 1 percent slope at 420 feet (128 m) elevation, under a white spruce and balsam poplar forest:

- Oi—0 to 2 inches (0 to 6 cm); very dark brown (10YR 2/2) slightly decomposed moss, leaves, twigs, and other woody debris; common very fine to coarse roots; slightly acid (pH 6.2); abrupt smooth boundary.
- O/C—2 to 11 inches (6 to 28 cm); stratified grayish brown (2.5Y 5/2) very fine sandy loam and very dark brown (10YR 2/2) moderately decomposed

plant material; massive; very friable, slightly sticky and slightly plastic; common very fine and medium roots; slightly acid (pH 6.2); clear smooth boundary.

- C1—11 to 49 inches (28 to 125 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and silt loam; weak thick platy structure; friable, slightly sticky and slightly plastic; few very fine and fine roots; many fine and prominent strong brown (7.5YR 5/8) redoximorphic concentrations; slightly alkaline (pH 7.6); diffuse smooth boundary.
- C2—49 to 60 inches (125 to 153 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and loamy fine sand; massive; very friable, nonsticky and nonplastic; few coarse prominent dark yellowish brown (10YR 4/4) redoximorphic concentrations; slightly alkaline (pH 7.6); diffuse smooth boundary.
- C3—60 to 72 inches (153 to 183 cm); dark grayish brown (2.5Y 4/2) stratified loamy fine sand and sand; single grain; loose, nonsticky and nonplastic; few coarse prominent yellowish red (5YR 4/6) redoximorphic concentrations and common fine and medium gray (5Y 5/1) redoximorphic depletions; slightly alkaline (pH 7.6).

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm) Note: Thin buried organic horizons may occur throughout the profile.

O horizon:

Color—hue of 10YR or 7.5YR; value from 2 to 5; chroma from 1 to 4

Reaction—strongly acid to neutral

C horizon:

Color—hue of 10YR to 5Y; value from 3 to 6; chroma from 2 to 4

Texture—stratas of silt loam, very fine sandy loam, fine sandy loam, loamy fine sand, and sand Reaction—slightly acid to slightly alkaline

2C horizon (when present):

Color—hue from 10YR to 5Y; value from 3 to 6; chroma from 1 to 3

Texture—stratas of loamy fine sand, fine sand, loamy sand, and coarse sand
Coarse fragment content—35 to 60 percent

Reaction—slightly acid to slightly alkaline

Ester Series

Taxonomic Classification

 Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Histoturbels

Setting

Depth class: Shallow to moderately deep over

bedrock and permafrost

Drainage class: very poorly drained

Landform: dominantly north-facing hillslopes

Parent material: organic matter over colluvium over

weathered bedrock *Slope:* 12 to 70 percent

Elevation: 750 to 2,800 feet (229 to 853 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 114—Ester peat, 20 to 45 percent slopes

Location in survey area: SW¼, SW¼, Section 11, T1N, R1W, Fairbanks Meridian

Typical Pedon

Ester peat—at 1,200 feet (366 m) elevation under a sparse black spruce forest with low shrubs and moss:

- Oi—0 to 4 inches (0 to 10 cm); brown (7.5YR 4/4) peat consisting of raw sphagnum moss; very strongly acid (pH 4.6); clear smooth boundary.
- Oe—4 to 9 inches (10 to 22 cm); olive gray (5Y 5/2) sphagnum moss mucky peat; many twigs, leaves, and roots; extremely acid (pH 4.2); abrupt smooth boundary.
- ABjjf—9 to 12 inches (22 to 30 cm); permanently frozen very dark grayish brown (10YR 3/2) silt loam; weak thin platy structure; firm, slightly sticky and slightly plastic; many black (10YR 2/1) and common gray (2.5Y 5/1) irregular streaks; many thin ice lenses (less than 1 mm); common roots; moderately acid (pH 5.8); clear wavy boundary.
- 2Cjjf—12 to 21 inches (30 to 53 cm); permanently frozen dark gray (10YR 4/1) very channery silt loam; massive; firm, slightly sticky and slightly plastic; common black (10YR 2/1) and few gray (2.5Y 5/1) irregular streaks; 40 percent

weathered schist fragments; moderately acid (pH 5.8); gradual wavy boundary.

2Crf—21 to 72 inches (53 to 183 cm); permanently frozen weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 40 cm)

Depth to permafrost: 10 to 30 inches (25 to 75 cm) Depth to bedrock: 20 to 39 inches (50 to 100 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 6; chroma from 1 to 8

Texture—peat or mucky peat

Reaction—extremely acid or very strongly acid

A horizon (when present):

Color—hue from 7.5YR to 2.5Y; value of 2 or 3; chroma of 1 or 2

Texture—silt loam or mucky silt loam Reaction—extremely acid to strongly acid

ABjjf or Bjjfg horizon:

Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 4

Coarse fragment content—0 to 35 percent Channer content—0 to 35 percent

Flagstone content—0 to 5 percent

Reaction—extremely acid to slightly acid

2Cjjf horizon:

Color—hue of 10YR, 2.5Y, 5Y, or N; value from 4 to 6; chroma from 0 to 2

Coarse fragment content—40 to 60 percent Channer content—0 to 60 percent Flagstone content—0 to 15 percent Reaction—extremely acid to slightly acid

Fairbanks Series

Taxonomic Classification

 Coarse-silty, mixed, superactive Typic Eutrocryepts

Setting

Depth class: deep and very deep Drainage class: well drained

Landform: hills

Parent material: loess

Slope: 0 to 50 percent

Elevation: 500 to 2,000 feet (152 to 609 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 118—Fairbanks silt loam, 12 to 20 percent slopes

Location in survey area: W½, Section 28, T1N, R3E, Fairbanks Meridian

Typical Pedon

Fairbanks silt loam—on a 14 percent slope at 985 feet (300 m) elevation, under a white spruce, paper birch, and quaking aspen forest:

- Oi—0 to 3 inches (0 to 8 cm); slightly decomposed forest litter.
- A—3 to 9 inches (8 to 23 cm); very dark grayish brown (10YR 3/2) silt loam; weak medium platy structure parting to weak medium granular; very friable, nonsticky and nonplastic; many fine and very fine, and common medium and coarse roots; moderately acid (pH 5.8); clear wavy boundary.
- Bw—9 to 30 inches (23 to 76 cm); light olive brown (2.5Y 5/4) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; few fine and very fine roots; few fine prominent brown (7.5YR 4/4) redoximorphic concentrations; moderately acid (pH 5.8); clear smooth boundary.
- BC—30 to 60 inches (76 to 152 cm); grayish brown (2.5Y 5/2) silt loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine and medium roots; few fine prominent brown (7.5YR 5/4) redoximorphic concentrations; slightly acid (pH 6.4); gradual smooth boundary.
- C—60 to 72 inches (152 to 183 cm); light olive brown (2.5Y 5/3) silt loam; massive; very friable, nonsticky and nonplastic; common coarse prominent yellowish brown (10YR 5/6) redoximorphic concentrations; slightly acid (pH 6.5).

Range in Characteristics

Thickness of silty loess mantle: greater than 40 inches (> 102 cm)

Organic layer thickness: 1 to 6 inches (3 to 15 cm)

A horizon:

Color—hue of 7.5YR or 10YR; value of 3 or 4; chroma from 2 to 4

Reaction—moderately acid to neutral

Bw horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 2 to 4

Reaction—moderately acid to neutral

C horizon:

Color—hue from 10YR to 5Y; value from 4 to 6; chroma from 2 to 4

Reaction—moderately acid to neutral

Fubar Series

Taxonomic Classification

Sandy-skeletal, mixed Typic Cryofluvents

Setting

Depth class: very shallow over sand and gravel Drainage class: moderately well drained Landform: flood plains and stream terraces Parent material: alluvium

Slope: 0 to 2 percent

Elevation: 397 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 124—Fubar-Piledriver complex, occasionally flooded Location in survey area: NW¼, SW¼, Section 15, T3S, R3E, Fairbanks Meridian

Typical Pedon

Fubar silt loam—on a level plain at 460 feet (140 m) elevation, under a white spruce forest with alder understory:

- Oi—0 to 2 inches (0 to 5 cm); black (7.5YR 2.5/1) slightly decomposed forest litter; strongly acid (pH 5.2); abrupt smooth boundary.
- C1—2 to 10 inches (5 to 25 cm); olive brown (2.5Y 4/3) silt loam stratified with very fine sandy loam; moderate thin platy structure; very friable, nonsticky and nonplastic; few fine prominent

- strong brown (7.5YR 5/6) redoximorphic concentrations; common medium and fine roots; slightly acid (pH 6.4); clear smooth boundary.
- 2C2—10 to 24 inches (25 to 60 cm); dark grayish brown (2.5Y 4/2) loamy fine sand stratified with fine sand; massive; very friable, nonsticky and nonplastic; slightly acid (pH 6.4); abrupt smooth boundary.
- 2C3—24 to 72 inches (60 to 183 cm); dark grayish brown (2.5Y 4/2) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; 40 percent rounded gravel; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 1 to 4 inches (2 to 10 cm) Depth to sand and gravel: 1 to 10 inches (3 to 25 cm)

O horizon:

Color—hue from 5YR to 10YR; value of 2 or 3; chroma of 1 or 2

Texture—moderately or slightly decomposed plant material

Reaction—strongly acid to slightly acid

C horizon:

Color—hue of 2.5Y or 5Y; value 3 or 4; chroma of 2 or 3

Texture—silt loam with stratas of very fine sandy loam, loamy fine sand, and fine sand Reaction—slightly acid to neutral

2C horizon:

Color—variegated

Texture—sand, fine sand, coarse sand or very to extremely gravelly sand or coarse sand Gravel content—35 to 85 percent Reaction—slightly acid or neutral

Gilmore Series

Taxonomic Classification

 Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts

Setting

Depth class: very shallow and shallow over weathered bedrock Drainage class: well drained Landform: hill crests and slopes

Parent material: loess over weathered bedrock

Slope: 0 to 70 percent

Elevation: 500 to 2,800 feet (152 to 853 m) *Precipitation:* 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 to -2

degrees C)

Typical Pedon Location

Map unit in which located: 127—Gilmore silt loam, 12 to 20 percent slopes Location in survey area: SW¼, NW¼, Section 24, T1N, R3E, Fairbanks Meridian

Typical Pedon

- Gilmore silt loam—on a 15 percent slope at 1,082 feet (330 m) elevation, under a white spruce, paper birch, and quaking aspen forest:
- Oi—0 to 3 inches (0 to 7 cm); very dark brown (10YR 2/2) partially decomposed forest litter and moss; many roots; mycelia; moderately acid (pH 5.8); abrupt smooth boundary.
- A—3 to 6 inches (7 to 15 cm); dark brown (10YR 3/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many roots; moderately acid (pH 5.8); abrupt wavy boundary.
- Bw—6 to 13 inches (15 to 33 cm); dark brown (10YR 4/3) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; few roots; moderately acid (pH 5.8); clear smooth boundary.
- 2BC—13 to 16 inches (33 to 41 cm); olive brown (2.5Y 4/3) channery silt loam; massive; very friable, nonsticky and nonplastic; 20 percent schist channers, 2 percent schist flags; slightly acid (pH 6.3); gradual wavy boundary.
- 2Cr—16 to 72 inches (41 to 183 cm); weathered fractured schist bedrock.

Range in Characteristics

Organic layer thickness: 2 to 4 inches (5 to 11 cm) Depth to bedrock: 8 to 24 inches (20 to 60 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 3; chroma from 1 to 3

Texture—slightly or moderately decomposed plant material

Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 4

Reaction—strongly acid to slightly acid

Bw horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 3 to 6

Reaction—strongly acid to slightly acid

2BC horizon (when present):

Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma from 3 to 6

Texture—silt loam or sandy loam

Coarse fragment content—20 to 75 percent

Channer content—20 to 75 percent Flagstone content—0 to 15 percent

Reaction—strongly acid to slightly acid

Goldstream Series

Taxonomic Classification

 Coarse-silty, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow to moderately deep over

permafrost

Drainage class: very poorly drained Landform: toeslopes and valley floors Parent material: organic matter over loess

Slope: 0 to 7 percent

Elevation: 500 to 1,200 feet (152 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 134—Goldstream peat, 3 to 7 percent slopes

Location in survey area: NE¼, NW¼, Section 11,

T1N, R3E, Fairbanks Meridian

Typical Pedon

Goldstream peat—on a 4 percent slope at 625 feet

(191 m) elevation, under stunted black spruce with low shrubs, sedge tussocks, and moss:

Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/2) peat; extremely acid (pH 4.4); clear smooth boundary.

Oe—3 to 9 inches (8 to 23 cm); black (10YR 2/1) mucky peat; extremely acid (pH 4.4); clear smooth boundary.

A—9 to 12 inches (23 to 30 cm); very dark grayish brown (2.5Y 3/2) mucky silt loam; massive; friable, nonsticky and nonplastic; many roots; very strongly acid (pH 4.7); gradual irregular boundary.

Bjjg/A—12 to 20 inches (30 to 50 cm); gray (5Y 5/1) silt loam (Bjjg) and very dark grayish brown (2.5Y 3/2) mucky silt loam (A); massive; friable, nonsticky and nonplastic; very strongly acid (pH 4.9); clear irregular boundary.

Cf—20 to 60 inches (50 to 152 cm); gray (5Y 5/1) permanently frozen silt loam.

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

Depth to permafrost: 14 to 24 inches (35 to 60 cm)

O horizon:

Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 3

Texture—peat or mucky peat

Reaction—extremely or very strongly acid

A horizon:

Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 3

Texture—silt loam or mucky silt loam Reaction—very strongly or strongly acid

Bjjg/A horizon:

Color—hue of 10YR, 2.5Y, 5Y, or N; value from 4 to 6; chroma from 0 to 2

Texture—silt loam or mucky silt loam Reaction—very strongly or strongly acid

Cf horizon:

Color—hue of 10YR, 2.5Y, 5Y, or N; value from 3 to 6; chroma from 0 to 3

Texture—silt loam

Reaction—very strongly or strongly acid

Histels

Taxonomic Classification

Histels

Setting

Depth class: shallow to moderately deep over

permafrost

Drainage class: very poorly drained Landform: flood plains and terraces

Parent material: organic matter over alluvium and/or

loess

Slope: 0 to 7 percent

Elevation: 400 to 1,200 feet (122 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Representative Pedon Location

Map unit in which located: 136—Histels Location in survey area: NE¼, SE¼, Section 13, T1N, R2W, Fairbanks Meridian

Representative Pedon

Histels—on a level slope at 426 feet (130 m) elevation, under sparse black spruce, birch scrub, and sedge tussock:

Oi—0 to 12 inches (0 to 30 cm); black (10YR 2/1) peat; common medium and few fine roots; very strongly acid (pH 4.8); clear smooth boundary.

Oe—12 to 16 inches (30 to 42 cm); very dark brown (10YR 2/2) mucky peat; moderately acid (pH 5.6); abrupt smooth boundary.

Oef—16 to 26 inches (42 to 65 cm); very dark brown (10YR 2/2) permanently frozen mucky peat; moderately acid (pH 5.6); clear smooth boundary.

Cfg—26 to 36 inches (65 to 91 cm); very dark gray (2.5Y 3/1) permanently frozen silt loam; strongly acid (pH 5.5).

Range in Characteristics

Depth to permafrost: 16 to 24 inches (40 to 60 cm)

Organic layer thickness: greater than 16 inches
(> 40 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 5;

chroma from 1 to 6
Texture—peat, mucky peat, or muck
Reaction—extremely acid to moderately acid

Cq horizon (when present):

Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma of 1 or 2

Texture—silt loam, mucky silt loam, silty clay loam or loamy fine sand

Reaction—moderately acid or slightly acid

Histic Cryaquepts

Taxonomic Classification

Histic Cryaquepts

Setting

Depth class: very deep

Drainage class: poorly drained Landform: depressions on terraces

Parent material: organic material over loess or loess

reworked by water Slope: 0 to 3 percent

Elevation: 500 to 1,200 feet (152 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Representative Pedon Location

Map unit in which located: 182—Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils Location in survey area: UTM zone 6, 498818 m N, 7173649 m E

Representative Pedon

Histic Cryaquepts—on a level slope at 585 feet (178 m) elevation, under sedges:

Oa—0 to 13 inches (0 to 32 cm); very dark brown (7.5YR 2.5/2) muck; many very fine and fine roots; very strongly acid (pH 5.0); abrupt smooth boundary.

C—13 to 30 inches (32 to 75 cm); olive brown (2.5Y 4/3) silt loam; massive; friable, slightly sticky and slightly plastic; common medium distinct grayish brown (2.5Y 5/2) mottles; strongly acid (pH 5.4); gradual smooth boundary.

Cg—30 to 72 inches (75 to 183 cm); dark grayish brown (2.5Y 4/2) silt loam; massive; friable, slightly sticky and slightly plastic; many medium prominent strong brown (7.5YR 4/6) mottles; moderately acid (pH 5.6).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

O Horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Texture—mucky peat or muck

Reaction—very strongly acid to moderately acid

C horizon:

Color—value of 3 or 4; chroma from 2 to 4 Texture—silt loam or very fine sandy loam Reaction—strongly acid to moderately acid

Cg horizon:

Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma of 1 or 2

Texture—silt loam with strata of very fine sand Reaction—strongly acid to slightly acid

Jarvis Series

Taxonomic Classification

 Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents

Setting

Depth class: moderately deep to sand and gravel

Drainage class: well drained Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent

Elevation: 400 to 650 feet (122 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 138—Jarvis-Chena complex

Location in survey area: UTM zone 6, 495247 m E, 7168290 m N

Typical Pedon

- Jarvis very fine sandy loam—on a level slope at 545 feet (166 m) elevation, under a paper birch and white spruce forest:
- Oe/C—0 to 3 inches (0 to 8 cm); black (10YR 2/1) moderately decomposed plant material and dark grayish brown (2.5Y 4/2) very fine sandy loam; common very fine to coarse roots; moderately acid (pH 5.6); clear wavy boundary.
- C1—3 to 6 inches (8 to 15 cm); olive brown (2.5Y 4/3) and olive gray (5Y 5/2) very fine sandy loam; massive; very friable, nonsticky and nonplastic; few very fine and medium roots; common medium distinct dark yellowish brown (10YR 4/6) redoximorphic concentrations; slightly acid (pH 6.4); clear wavy boundary.
- C2—6 to 16 inches (15 to 41 cm); grayish brown (2.5Y 5/2) and dark yellowish brown (10YR 4/6) stratified fine sand and very fine sand; massive; very friable, nonsticky and nonplastic; few very fine and medium roots; few medium prominent gray (5Y 6/1) redoximorphic depletions; neutral (pH 7.2); gradual smooth boundary.
- C3—16 to 24 inches (41 to 61 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and fine sand; massive; very friable, nonsticky and nonplastic; few very fine and fine roots; slightly alkaline (pH 7.4); abrupt smooth boundary.
- 2C4—24 to 72 inches (61 to 183 cm); gray (5Y 5/1) sand; massive; loose, nonsticky and nonplastic; 10 percent gravel; slightly acid (pH 6.4).

Range in Characteristics

Organic layer thickness: 1 to 4 inches (3 to 10 cm) Depth to sand and gravel: 13 to 40 inches (33 to 102 cm)

Note: Organic carbon decreases irregularly with depth; thin buried organic horizons may occur throughout the profile.

Oe/C horizon (C material may not be present):
Color—O material: hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2—C material: hue of 2.5Y or 5Y; value from 3 to 5; chroma of 1 or 2

Texture—moderately decomposed and slightly decomposed forest litter, mixed in some pedons with very fine sandy loam or silt loam

Reaction—very strongly acid to neutral

C horizon:

Color—hue from 10YR to 5Y; value of 4 or 5; chroma of 1 to 6

Texture—stratas of very fine sandy loam, silt loam, loamy fine sand, fine sand, or sand Gravel content—0 to 15 percent

Reaction—slightly acid to slightly alkaline

2C horizon:

Color—hue from 10YR to 5Y; value from 2 to 6; chroma from 1 to 4

Texture—sand or loamy sand
Coarse fragment content—35 to 70 percent
Gravel content—25 to 60 percent
Cobble content—10 to 30 percent
Reaction—slightly acid to slightly alkaline

Lemeta Series

Taxonomic Classification

Euic, subgelic Typic Fibristels

Setting

Depth class: Shallow to moderately deep over

permafrost

Drainage class: very poorly drained

Landform: fens on terraces
Parent materials: organic matter

Slope: 0 to 1 percent

Elevation: 400 to 900 feet (129 to 290 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 140—Lemeta peat Location in survey area: SE¼, SW¼, Section 32, T1N, R1W, Fairbanks Meridian

Typical Pedon

Lemeta peat—on a level slope at 420 feet (128 m) elevation under sparse black spruce, scrub birch, sphagnum moss, and sedge vegetation:

Oi1—0 to 5 inches (0 to 12 cm); brown (7.5YR 5/3)

- slightly decomposed moss peat; few very fine to coarse roots; extremely acid (pH 3.8); gradual smooth boundary.
- Oi2—5 to 11 inches (12 to 28 cm); brown (7.5YR 5/3) slightly decomposed moss and lichen peat; few very fine to coarse roots; extremely acid (pH 4.0); clear wavy boundary.
- Oi3—11 to 18 inches (28 to 45 cm); strong brown (7.5YR 5/6) slightly decomposed moss peat; extremely acid (pH 4.0); clear wavy boundary.
- Oe—18 to 20 inches (45 to 50 cm); black (7.5YR 2.5/1) moderately decomposed mucky sedge peat; extremely acid (pH 4.0); clear smooth boundary.
- Oef1—20 to 24 inches (50 to 60 cm); black (7.5YR 2.5/1) permanently frozen moderately decomposed mucky sedge peat; extremely acid (pH 4.0); gradual wavy boundary.
- Oef2—24 to 60 inches (60 to 152 cm); black (10YR 2/1) permanently frozen moderately decomposed mucky sedge peat; 20 percent dark brown (7.5YR 3/3) coarse wood fragments; strongly acid (pH 5.4).

Range In Characteristics

Depth to permafrost: 14 to 24 inches (35 to 60 cm)
Organic layer thickness: greater than 40 inches
(> 102 cm)

Oi horizons:

Color—hue of 7.5YR or 10YR; value from 2 to 5; chroma from 3 to 6
Reaction—extremely acid to moderately acid

Oe and Oef horizons:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Reaction—extremely acid to moderately acid

Oa horizons (when present):

Color—hue of 7.5Y or 10YR; value from 1 to 3; chroma from 1 to 3

Reaction—extremely acid to moderately acid

Liscum Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts

Setting

Depth class: deep or very deep over sand and

gravel

Drainage class: very poorly drained

Landform: alluvial flats

Parent material: organic material over loess or

alluvium

Slope: 0 to 2 percent

Elevation: 400 to 650 feet (121 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 141—Liscum-Noonku complex

Location in survey area: NE¼, SE¼, Section 5, T2S, R2E, Fairbanks Meridian

Typical Pedon

Liscum peat—on a level slope at 420 feet (128 m) elevation under sweet gail, leather leaf, and sedge vegetation:

- Oi—0 to 4 inches (0 to 8 cm); dark brown (7.5YR 3/3) sedge peat; common very fine to medium roots; strongly acid (pH 5.4); clear wavy boundary.
- Oa—4 to 11 inches (8 to 28 cm); black (7.5YR 2.5/1) muck; many very fine and fine roots; moderately acid (pH 5.6); clear irregular boundary.
- A—11 to 15 inches (28 to 38 cm); black (10YR 2/1) mucky silt loam; many very fine and fine roots; moderately acid (pH 5.6); clear irregular boundary.
- Bg—15 to 70 inches (38 to 178 cm); gray (5Y 5/1) stratified very fine sandy loam and silt loam; massive; friable; slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations and common medium prominent bluish gray (5PB 5/1) redoximorphic depletions; neutral (pH 6.6); gradual irregular boundary.
- C—70 to 72 inches (178 to 183 cm); dark gray (N 4/) fine sandy loam; massive; friable; nonsticky and nonplastic; neutral (pH 7.2).

Range In Characteristics

Organic layer thickness: 8 to 16 inches (20 to 40 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 4;

chroma from 1 to 3

Texture—peat, mucky peat, or muck Reaction—strongly acid to slightly acid

A horizon:

Color—hue of 10YR or 2.5Y; value of 2 or 3;

chroma of 1 or 2

Texture—silt loam or sandy loam

Reaction—moderately acid to neutral

Bg horizon:

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5;

chroma from 0 to 2

Texture—silt loam with strata of very fine sandy loam, loamy fine sand, and fine sand

Coarse fragment content—0 to 10 percent

Reaction—slightly acid or neutral

C horizon (when present):

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5;

chroma from 0 to 3

Texture—fine sandy loam or sandy loam

Coarse fragment content—0 to 15 percent

Reaction—slightly acid or neutral

2C horizon (when present):

Color—variegated

Texture—sand or coarse sand

Coarse fragment content—15 to 50 percent

Gravel content—15 to 50 percent

Cobble content—0 to 10 percent

Reaction—slightly acid or neutral

Minto Series

Taxonomic Classification

 Coarse-silty, mixed, superactive Aquic Eutrocryepts

Setting

Depth class: very deep

Drainage class: moderately well drained

Landform: footslopes of hills

Parent material: loess or colluviated loess

Slope: 0 to 20 percent

Elevation: 500 to 2,000 feet (152 to 609 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 143—Minto silt loam, 3 to 7 percent slopes

Location in survey area: UTM zone 6, 496550 m E, 7196300 m N

Typical Pedon

Minto silt loam—on a 7 percent slope at 820 feet (250 m) elevation, under a paper birch and white spruce forest:

- Oi—0 to 5 inches (0 to 13 cm); dark brown (7.5YR 3/2) slightly decomposed leaves, twigs, and moss; few fine and medium roots; very strongly acid (pH 5.0); abrupt smooth boundary.
- A—5 to 9 inches (13 to 23 cm); very dark grayish brown (10YR 3/2) silt loam; moderate medium platy structure; friable, nonsticky and nonplastic; few fine and medium roots; moderately acid (pH 6.0); clear smooth boundary.
- Bw—9 to 16 inches (23 to 41 cm); light olive brown (2.5Y 5/3) silt loam; moderate medium platy structure; friable, nonsticky and nonplastic; few fine roots; common medium faint grayish brown (2.5Y 5/2) redoximorphic depletions; moderately acid (pH 6.0); diffuse wavy boundary.
- C—16 to 72 inches (41 to 183 cm); grayish brown (2.5Y 5/2) silt loam; massive; friable, nonsticky and nonplastic; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; slightly acid (pH 6.3).

Range in Characteristics

Organic layer thickness: 2 to 6 inches (5 to 15 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2

Texture—slightly or moderately decomposed plant material

Reaction—very strongly acid or strongly acid

A horizon:

Color—value of 2 or 3; chroma of 1 or 2 Texture—silt loam or very fine sandy loam Reaction—moderately acid or slightly acid

B horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 2 to 5

Texture—silt loam or very fine sandy loam Reaction—slightly acid to slightly alkaline

C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 6; chroma of 2 or 3

Texture—silt loam or very fine sandy loam Reaction—slightly acid or neutral

Mosquito Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost

Drainage class: very poorly drained Landform: depressions on alluvial flats Parent material: organic matter over alluvium Slope: 0 to 2 percent

Elevation: 400 to 650 feet (121 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 149—Mosquito mucky peat

Location in survey area: SW¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

- Mosquito mucky peat—on a level plain at 432 feet (132 m) elevation, under dwarf birch and sedge vegetation:
- Oi—0 to 15 inches (0 to 38 cm); very dark brown (10YR 2/2) peat; common very fine and few fine

- and medium roots; moderately acid (pH 6.0); clear wavy boundary.
- OA-15 to 18 inches (38 to 46 cm); dark brown (7.5YR 3/2) mucky silt loam; common very fine and few fine roots; moderately acid (pH 6.0); clear wavy boundary.
- Cg-18 to 24 inches (46 to 60 cm); dark greenish gray (5BG 4/1) very fine sandy loam stratified with silt loam; massive; friable, nonsticky and nonplastic; few fine roots; few fine prominent strong brown (7.5YR 5/6) redoximorphic concentrations; slightly acid (pH 6.4); clear wavy boundary.
- Cfg-24 to 60 inches (60 to 152 cm); dark greenish gray (5BG 4/1) permanently frozen very fine sandy loam stratified with silt loam; massive; friable, nonsticky and nonplastic; few fine roots; slightly acid (pH 6.4).

Range in Characteristics

Organic layer thickness: 9 to 16 inches (23 to 41 cm)

Depth to permafrost: 14 to 31 inches (36 to 80 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 3

Texture—peat, mucky peat, or muck Reaction—strongly to slightly acid

Bg or Cg horizon:

Color-hue of 10YR, 2.5Y, 5Y, 5BG, or N; value of 4 or 5; chroma from 0 to 2

Texture—stratas of silt loam, silty clay loam, very fine sandy loam and loamy fine sand Reaction—slightly acid or neutral

Bfg or Cfg horizon:

Color-hue of 10YR, 2.5Y, 5Y, 5BG, or N; value of 4 or 5; chroma from 0 to 2

Texture—stratas of silt loam, silty clay loam, very fine sandy loam and loamy fine sand Reaction—slightly acid or neutral

Noonku Series

Taxonomic Classification

Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents

Setting

Depth class: very deep

Drainage class: very poorly drained

Landform: sloughs and depressions on flood plains

Parent material: alluvium Slope: 0 to 1 percent

Elevation: 400 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 154—North Pole-Noonku complex

Location in survey area: NE¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

- Noonku silt loam—in a level slough at 465 feet (142 m) elevation, under grass and sedge vegetation with some willow and birch shrubs:
- Oe—0 to 2 inches (0 to 4 cm); very dark brown (7.5YR 2.5/2) moderately decomposed sedge, moss and grass blades; many very fine to medium and common coarse roots; neutral (pH 7.0); abrupt smooth boundary.
- A-2 to 6 inches (4 to 16 cm); dark brown (7.5YR 3/2) silt loam; massive; friable, nonsticky and nonplastic; common very fine and fine roots; slightly acid (pH 6.2); gradual smooth boundary.
- Cg1-6 to 20 inches (16 to 50 cm); dark gray (2.5Y 4/1) very fine sandy loam stratified with silt loam; massive; friable; nonsticky and nonplastic; few very fine and fine roots; few coarse prominent dark brown (7.5YR 3/3) redoximorphic concentrations; neutral (pH 6.8); diffuse smooth boundary.
- Cg2-20 to 28 inches (50 to 72 cm); greenish gray (5G 5/1) very fine sandy loam stratified with loamy fine sand; very friable; nonsticky and nonplastic; few fine prominent strong brown (7.5YR 5/8) redoximorphic concentrations;

neutral (pH 6.8); diffuse smooth boundary.

Cg3-28 to 47 inches (72 to 120 cm); dark gray (N 4/) loamy fine sand stratified with very fine sandy loam; very friable; nonsticky and nonplastic; common medium prominent reddish yellow (7.5YR 7/8) redoximorphic

concentrations; neutral (pH 6.8); diffuse smooth boundary.

2Cg4—47 to 72 inches (120 to 183 cm); gray (N 5/) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; few medium prominent grayish green (5G 5/2) redoximorphic depletions; neutral (pH 6.8).

Range in Characteristics

Organic layer thickness: 1 to 5 inches (3 to 13 cm)
Depth to sand and gravel: 40 to greater than 60 inches (101 to > 152 cm)

Note: Buried organic layers may occur at any depth.

O horizon:

Color—hue of 10YR or 7.5YR; value of 2 or 3; chroma from 1 to 3

Texture—slightly or moderately decomposed plant material

Reaction—slightly acid or neutral

A horizon:

Color—hue from 7.5YR to 2.5Y; value from 2 to 4; chroma from 1 to 2

Texture—silt loam or very fine sandy loam Reaction—slightly acid or neutral

Cg horizon:

Color—hue of 2.5Y, 5Y, 10Y, 5GY, 5G, or N; value from 3 to 5; chroma from 0 to 2

Texture—silt loam or very fine sandy loam; thin layers of coarser material are occasionally present

Reaction—slightly acid to slightly alkaline

2Cg horizon (when present):

Color—hue of 2.5Y, 5Y, 5GY, 5G, or N; value from 2 to 5; chroma from 0 to 3

Texture—loamy sand, loamy fine sand, fine sand, or sand

Coarse fragment content—0 to 70 percent Reaction—slightly acid to neutral

North Pole Series

Taxonomic Classification

 Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aeric Cryaquepts

Setting

Depth class: moderately deep over sand and gravel

Drainage class: poorly drained

Landform: alluvial flats
Parent material: alluvium
Slope: 0 to 2 percent

Elevation: 400 to 650 feet (121 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 154—North Pole-Noonku complex

Location in survey area: NE¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

North Pole very fine sandy loam—on a level plain at 540 feet (165 m) elevation, under a tamarack and black spruce forest with Labrador tea understory and moss ground cover:

Oi—0 to 2 inches (0 to 6 cm); very dark brown (7.5YR 2.5/2) slightly decomposed moss; common very fine to coarse roots; neutral (pH 7.0); abrupt smooth boundary.

Oe—2 to 4 inches (6 to 11 cm); black (2.5Y 2.5/1) moderately decomposed moss; common fine and very fine roots; neutral (pH 7.3); abrupt irregular boundary.

Bg/A—4 to 18 inches (11 to 45 cm); 60 percent light olive brown (2.5Y 5/3) and 40 percent very dark gray (10YR 3/1) very fine sandy loam stratified with very fine sand; weak thick platy structure; friable, nonsticky and nonplastic; common medium distinct gray (2.5Y 6/1) redoximorphic concentrations; few fine and very fine roots; neutral (pH 7.2); gradual smooth boundary.

Bw—18 to 39 inches (45 to 98 cm) light olive brown (2.5Y 5/4) very fine sandy loam stratified with silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; neutral (pH 7.2); gradual smooth boundary.

2C—39 to 49 inches (98 to 125 cm); olive brown (2.5Y 4/3) loamy fine sand; massive; very friable, nonsticky and nonplastic; neutral (pH 7.2); gradual smooth boundary.

2Cg—49 to 72 inches (125 to 183 cm); gray (2.5Y 5/1) sand; single grain; loose; nonsticky and nonplastic; neutral (pH 7.2).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm)

Depth to sand and gravel: 10 to 40 inches (25 to 102 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2

Texture—slightly or moderately decomposed plant material

Reaction—very strongly acid to neutral

B horizon:

Color—hue from 10YR to 5Y; value from 3 to 5; chroma from 1 to 4

Texture—strata of very fine sandy loam, silt loam, loamy very fine sand, and loamy fine sand Reaction—slightly acid or neutral

2C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 1 to 3

Texture—sand or loamy sand
Coarse fragment content—0 to 70 percent
Gravel content—0 to 70 percent
Cobble content— 0 to 15 percent
Reaction—neutral or slightly alkaline

Peede Series

Taxonomic Classification

 Coarse-silty, mixed, superactive, nonacid Typic Cryaquents

Setting

Depth class: very deep

Drainage class: very poorly drained Landform: depressions on flood plains

Parent material: alluvium Slope: 0 to 1 percent

Elevation: 400 to 650 feet (121 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 155—Peede silt loam Location in survey area: SW¼, SE¼, Section 23, T1S, R2W, Fairbanks Meridian

Typical Pedon

Peede silt loam—on a level depression at 420 feet (128 m) elevation, under grass and sedge vegetation with some willow shrubs:

Oe—0 to 2 inches (0 to 5 cm); very dark brown (7.5YR 2.5/2) moderately decomposed plant material; few fine and very fine roots; slightly acid (pH 6.1); abrupt smooth boundary.

A—2 to 5 inches (5 to 13 cm); very dark grayish brown (2.5Y 3/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; common very fine and fine roots; neutral (pH 6.6); clear smooth boundary.

Cg1—5 to 10 inches (13 to 25 cm); grayish brown (2.5Y 5/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; neutral (pH 6.6); diffuse smooth boundary.

Cg2—10 to 72 inches (25 to 183 cm); dark gray (N 4/) silt loam; massive; friable, slightly sticky and slightly plastic; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 1 to 5 inches (3 to 13 cm)

Depth to sand and gravel: 40 to greater than 60 inches (101 to > 152 cm)

Note: Buried organic layers may occur at any depth.

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Texture—moderately or well decomposed plant material

Reaction—slightly acid or neutral

Cg horizon:

Color—hue of 2.5Y, 5Y, 10Y, 5GY, or N; value from 3 to 5; chroma from 0 to 2

Texture—silt loam or very fine sandy loam Reaction—slightly acid to slightly alkaline

2C horizon (when present):

Color—hue of 2.5Y or 5Y; value from 2 to 5; chroma from 1 to 3

Texture—loamy sand, loamy fine sand, fine sand, or sand

Coarse fragment content—0 to 70 percent Reaction—slightly acid or neutral

Piledriver Series

Taxonomic Classification

 Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents

Setting

Depth class: moderately deep over sand and gravel

Drainage class: somewhat poorly drained

Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent

Elevation: 400 to 650 feet (121 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 112—Eielson-Piledriver complex

Location in survey area: SW¼, SW¼, Section 23, T3S, R3E, Fairbanks Meridian

Typical Pedon

- Piledriver very fine sandy loam—on a level plain at 545 feet (166 m) elevation, under a paper birch and white spruce forest:
- Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/3) and very dark brown (7.5YR 2.5/2) slightly decomposed moss, leaves, twigs, and other woody debris; common fine and few medium roots; extremely acid (pH 4.1); clear wavy boundary.
- C1—3 to 10 inches (8 to 25 cm); light olive brown (2.5Y 5/3) very fine sandy loam; weak medium platy structure parting to weak medium granular;

- friable, nonsticky and nonplastic; few fine roots; many medium, distinct gray redoximorphic depletions; slightly acid (pH 6.5); abrupt smooth boundary.
- C2—10 to 15 inches (25 to 38 cm); light olive brown (2.5Y 5/3) silt loam; weak medium platy structure parting to weak medium granular; very friable, nonsticky and nonplastic; few fine roots; common medium distinct dark gray (5Y 4/1) redoximorphic depletions; common black (7.5YR 2.5/1) strata of organic material up to 1 inch (up to 3 cm) thick; neutral (pH 7.2); clear smooth boundary.
- C3—15 to 33 inches (38 to 84 cm); grayish brown (2.5Y 5/2) loamy fine sand; weak thin platy structure; very friable, nonsticky and nonplastic; common medium faint gray (2.5Y 5/1) redoximorphic depletions; neutral (pH 7.3); clear smooth boundary.
- 2C4—33 to 72 inches (84 to 183 cm); grayish brown (2.5Y 5/2) extremely gravelly sand; single grain; loose, nonsticky and nonplastic; 70 percent rounded gravel; neutral (pH 7.3).

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm)

Depth to sand and gravel: 20 to 40 inches (50 to 102 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Reaction—extremely acid to slightly acid

C horizon:

Color—hue from 10YR to 5Y; value from 3 to 5; chroma of 2 or 3

Texture—very fine sandy loam or silt loam with stratas of loamy very fine sand, and loamy fine sand

Reaction—slightly acid or neutral

2C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma of 2 or 3

Coarse fragment content—15 to 70 percent Gravel content—15 to 70 percent Cobble content—0 to 10 percent Reaction—slightly acid or neutral

Salchaket Series

Taxonomic Classification

Coarse-loamy, mixed, superactive, nonacid
 Typic Cryofluvents

Setting

Depth class: very deep Drainage class: well drained Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent

Elevation: 400 to 650 feet (122 to 198 meters) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 162—Salchaket very fine sandy loam

Location in survey area: NW¼, NW¼, Section 21, T1S, R2E, Fairbanks Meridian

Typical Pedon

Salchaket very fine sandy loam—on a level natural levee at 420 feet (128 m) elevation, under a paper birch and white spruce forest:

Oi—0 to 3 inches (0 to 7 cm); very dark brown (10YR 2/2) mat of slightly decomposed forest litter and moss; many very fine to coarse roots; strongly acid (pH 5.2); abrupt smooth boundary.

A—3 to 6 inches (7 to 14 cm); brown (10YR 4/3) very fine sandy loam stratified with silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; common very fine to coarse roots; few medium distinct dark grayish brown (2.5Y 4/2) redoximorphic depletions; strongly acid (pH 5.4); gradual smooth boundary.

C1—6 to 24 inches (14 to 62 cm); light olive brown (2.5Y 5/3) very fine sandy loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine roots; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; moderately acid (pH 5.6); gradual smooth boundary.

C2—24 to 45 inches (62 to 114 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and fine sand; massive; very friable, nonsticky and

nonplastic; few fine prominent strong brown (7.5YR 5/6) redoximorphic concentrations; neutral (pH 7.0); gradual smooth boundary. 2C3—45 to 72 (114 to 183 cm); variegated very gravely sand; loose; single grain; nonsticky and nonplastic; neutral (pH 6.7).

Range in Characteristics

Thickness of organic mat: 1 to 7 inches (3 to 18 cm)

Depth to sand and gravel 40 to greater than 60 inches (101 to > 152 cm)

Note: Organic carbon decreases irregularly with depth; thin buried organic horizons may occur throughout the profile.

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 2 to 4

Texture—slightly decomposed to moderately decomposed plant material

Reaction—strongly to slightly acid

C horizon:

Color—hue of 2.5Y or 5Y; value of 4 or 5; chroma of 2 or 3

Texture—stratas of silt loam, loamy very fine sand, loamy fine sand, and fine sand Reaction—slightly acid to slightly alkaline

2C horizon (when present):
Color—variegated
Gravel content—0 to 65 percent
Reaction—slightly acid to slightly alkaline

Saulich Series

Taxonomic Classification

 Coarse silty, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow or moderately deep over permafrost

Drainage class: very poorly drained Landform: valley sides and hillslopes Parent material: colluviated loess

Slope: 0 to 30 percent

Elevation: 500 to 1,300 feet (152 to 376 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 164—Saulich peat, 3 to 7 percent slopes

Location in survey area: UTM zone 6, 472550 m E, 7192900 m N

Typical Pedon

Saulich peat—on a 4 percent slope at 510 feet (155 m) elevation, under a sparse forest of black spruce with an understory of low shrubs:

- Oi—0 to 9 inches (0 to 23 cm); very dark brown (7.5YR 2.5/3) peat mat of undecomposed sphagnum moss and roots; strongly acid (pH 5.2); clear smooth boundary.
- Oe—9 to 16 inches (23 to 41 cm); black (7.5YR 2.5/1) and dark brown (7.5YR 3/2) mucky peat; mat of moderately decomposed moss; many roots; slightly acid (pH 6.4); abrupt smooth boundary.
- Bg/A—16 to 21 inches (41 to 53 cm); very dark grayish brown (2.5Y 3/2) and black (7.5YR 2.5/1) silt loam; massive; friable, nonsticky and nonplastic; few roots; few medium prominent light brownish gray (10YR 6/2) redoximorphic depletions; neutral (pH 6.6); gradual boundary.
- Cfg—21 to 72 inches (53 to 183 cm); dark grayish brown (2.5Y 4/2) permanently frozen silt loam; massive; many clear ice lenses; few medium prominent light brownish gray (10YR 6/2) redoximorphic depletions; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

Depth to permafrost: 16 to 24 inches (41 to 60 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 3

Texture—peat or mucky peat

Reaction—extremely acid to slightly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Texture—silt loam or mucky silt loam

Reaction—moderately acid to neutral

B horizon:

Color—hue from 10YR to 5Y; value from 3 to 5; chroma from 1 to 3

Texture—silt loam or very fine sandy loam Reaction—moderately acid to neutral

C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 1 to 3

Texture—silt loam or very fine sandy loam Reaction—slightly acid or neutral

Steese Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive Typic Eutrocryepts

Setting

Depth class: moderately deep over weathered

bedrock

Drainage class: well drained Landform: slopes and crests of hills

Parent material: loess over weathered schist

bedrock

Slope range: 3 to 70 percent

Elevation: 750 to 2,800 feet (229 to 853 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3

degrees C)

Typical Pedon Location

Map unit in which located: 170—Steese silt loam, 7 to 12 percent slopes

Location in survey area: NW¼, NW¼, Section 14, T1N, R3E, Fairbanks Meridian

Typical Pedon

Steese silt loam—on an 8 percent slope at 885 feet (270 m) elevation, under a paper birch, white spruce, and quaking aspen forest with alder shrubs:

Oi—0 to 2 inches (0 to 5 cm); dark brown (7.5YR 3/2) slightly decomposed forest litter and moss;

- many roots; mycelia at base of horizon; charcoal fragments; slightly acid (pH 6.1); abrupt smooth boundary.
- A—2 to 5 inches (5 to 13 cm); brown (10YR 4/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many roots; common mica flakes; strongly acid (pH 5.3); abrupt wavy boundary.
- Bw—5 to 20 inches (13 to 51 cm); light olive brown (2.5Y 5/4) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; common medium and fine roots; few medium distinct yellowish brown (10YR 5/6) redoximorphic concentrations; few charcoal fragments; many mica flakes; moderately acid (pH 5.8); abrupt wavy boundary.
- BC—20 to 27 inches (51 to 69 cm); brown (10YR 5/3) silt loam; weak thin platy structure; very friable, nonsticky and nonplastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; moderately acid (pH 5.8); clear wavy boundary.
- 2C—27 to 33 inches (69 to 84 cm); light olive brown (2.5Y 5/3) channery silt loam; massive; very friable; 20 percent schist channers; slightly acid (pH 6.3); clear wavy boundary.
- 2Cr—33 to 72 inches (84 to 183 cm); highly weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm)

Depth to unconsolidated bedrock: 20 to 40 inches

(51 to 102 cm)

A horizon:

Color—hue of 7.5YR or 10YR; value of 3 or 4; chroma from 2 to 4

Reaction—strongly acid to slightly acid

Bw horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 3 to 6

Reaction—strongly acid to slightly acid

2C horizon:

Color—hue of 10YR or 2.5Y; value from 4 to 6; chroma from 3 to 6

Texture—silt loam, very fine sandy loam, or loamy fine sand

Coarse fragment content—15 to 40 percent Channer content—15 to 40 percent Flagstone content—0 to 5 percent Reaction—strongly acid to slightly acid

Tanacross Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow to moderately deep over

permafrost

Drainage class: poorly drained Landform: alluvial terraces

Parent material: organic matter over alluvium

Slope: 0 to 2 percent

Elevation: 400 to 650 feet (122 to 198 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 179—Tanacross peat Location in survey area: SE¼, NE¼, Section 27, T1S, R2E, Fairbanks Meridian

Typical Pedon

Tanacross peat—on a level plain at 650 feet (198 m) elevation, under a black spruce forest:

- Oi—0 to 9 inches (0 to 22 cm); dark brown (7.5YR 3/2) moss peat; many very fine to coarse roots; very strongly acid (pH 4.8); clear smooth boundary.
- A—9 to 11 inches (22 to 27 cm); black (2.5Y 2.5/1) mucky silt loam; massive; friable, slightly sticky and slightly plastic; few very fine to medium roots; slightly acid (pH 6.2); broken irregular boundary.
- Bjjg—11 to 17 inches (27 to 42 cm); grayish brown (2.5Y 5/2) very fine sandy loam stratified with silt loam; massive; friable, slightly sticky and slightly plastic; many fine and medium strong brown (7.5YR 5/6) redoximorphic concentrations, common irregular very dark gray (2.5Y 3/1) streaks; slightly acid (pH 6.4); gradual wavy boundary.
- Bjjfg—17 to 60 inches (42 to 152 cm); gray (2.5Y 5/1) and dark yellowish brown (10YR 4/6) permanently frozen very fine sandy loam

stratified with silt loam; massive; extremely firm, slightly sticky and slightly plastic; few irregular very dark gray (2.5Y 3/1) streaks; slightly acid (pH 6.2).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to

Depth to permafrost: 10 to 28 inches (25 to 71 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 6

Texture—peat, mucky peat, or muck Reaction—extremely acid to strongly acid

B horizon:

Color—hue from 10YR to 5Y; value of 4 or 5; chroma from 1 to 6

Texture—stratas of silt loam, very fine sandy loam, fine sand or sand

Reaction—strongly acid to slightly acid

Bf horizon:

Color—hue from 10YR to 5Y; value of 4 or 5; chroma from 1 to 6

Texture—stratas of silt loam, very fine sandy loam, fine sand or sand

Reaction—strongly acid to slightly acid

Tanana Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: shallow to moderately deep over

permafrost

Drainage class: poorly drained

Landform: terraces

Parent material: alluvium or loess over alluvium

Slope: 0 to 2 percent

Elevation: 400 to 650 feet (122 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 180—Tanana mucky silt loam

Location in survey area: NW¼, NW¼, Section 21, T1S, R2E, Fairbanks Meridian

Typical Pedon

- Tanana mucky silt loam—on less than 1 percent slope at 470 feet (142 m) elevation, under a black spruce forest:
- Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/2) mat of slightly decomposed moss and forest litter; many roots; mycelia; very strongly acid (pH 4.7); abrupt wavy boundary.
- OA—3 to 5 inches (8 to 14 cm); black (10YR 2/1) mucky silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; common fine and medium roots; moderately acid (pH 5.6); clear broken boundary.
- Bjjg—5 to 17 inches (14 to 44 cm); mixed olive brown (2.5Y 4/3) and strong brown (7.5YR 5/6) silt loam stratified with very fine sandy loam; weak medium platy structure; very friable, nonsticky and nonplastic; common medium faint mottles of grayish brown (2.5Y 5/2); common fine roots; common pockets and lenses of congeloturbate black (10YR 2/1); slightly acid (pH 6.5); clear broken boundary.
- Cjig—17 to 25 inches (44 to 63 cm); mixed gray (5Y 5/1) and olive brown (2.5Y 4/3) very fine sandy loam stratified with fine sandy loam; weak medium platy structure parting to weak thin platy; very friable, nonsticky and nonplastic; many coarse prominent mottles of strong brown (7.5YR 4/6); few fine roots; common pockets and lenses of congeloturbate black (10YR 2/1); few pockets of fibric organic material at contact with permafrost; slightly acid (pH 6.5); abrupt wavy boundary.
- Cjjfg—25 to 72 inches (63 to 183 cm); mixed gray (5Y 5/1) and olive brown (2.5Y 4/3) permanently frozen silt loam stratified with sandy loam; massive, extremely firm, nonsticky and

nonplastic; many coarse prominent mottles of strong brown (7.5YR 4/6); many thin lenses of ice; few pockets of fibric organic material and wood; neutral (pH 6.7).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm)

Depth to permafrost: 16 to 40 inches (41 to 101 cm)

Note: Buried A and O horizons may occur

throughout the profile.

O horizon:

Color—hue from 5YR to 2.5Y; value from 2 to 4; chroma of 1 or 2

Texture—slightly decomposed to moderately decomposed plant material

Reaction—very strongly acid to slightly acid

A horizon (when present):

Color—hue from 5YR to 2.5Y; value from 2 to 4; chroma from 1 to 3

Texture—silt loam and very fine sandy loam Reaction—moderately acid to neutral

Bg horizon:

Color—hue from 7.5YR to N; value from 3 to 5; chroma from 0 to 6

Texture—silt loam and very fine sandy loam, with occasional thin lenses of fine sandy loam and fine sand

Reaction—slightly acid or neutral

Cg and Cf horizon:

Color—hue from 10YR to N; value from 3 to 5; chroma from 0 to 4

Texture—silt loam and very fine sandy loam, with occasional thin lenses of sandy loam and fine sand

Coarse fragment content—0 to 5 percent Reaction—slightly acid or neutral

Terric Cryofibrists

Taxonomic Classification

Terric Cryofibrists

Setting

Depth class: very deep

Drainage class: very poorly drained

Landform: depressions on flood plains and terraces
Parent material: organic matter over alluvium

Slope: 0 to 1 percent

Elevation: 400 to 1,201 feet (122 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 136—Histels Location in survey area: UTM zone 6, 456439 m N, 717151 m E

Representative Pedon

Terric Cryofibrist—in a level depression at 426 feet (130 m) elevation, under sedges:

Oi1—0 to 10 inches (0 to 25 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; moderately acid (pH 5.8); gradual smooth boundary.

C/Oi—10 to 12 inches (25 to 30 cm); very dark gray (10YR 3/1) peaty silt loam; massive; slightly sticky and slightly plastic; many very fine to medium roots; slightly acid (pH 6.2); gradual smooth boundary.

Oi2—12 to 28 inches (30 to 71 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; slightly acid (pH 6.2); clear smooth boundary.

Oa—28 to 40 inches (71 to 102 cm); black (10YR 2/1) muck; slightly acid (pH 6.2); clear smooth boundary.

Cg—40 to 72 inches (102 to 183 cm); black (5Y 2.5/1) mucky silty clay loam; massive; sticky and plastic; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 16 to 51 inches (41 to 130 cm)

Note: Particle size class of mineral layers is coarsesilty or fine-silty.

O horizon:

Color—value of 2 or 3; chroma from 1 to 3 Reaction—very strongly acid to neutral

Cg horizon:

Color—hue of 2.5Y, 5Y, 10Y, 5GY, or N; value from 2 to 4; chroma from 0 to 2

Texture—silt loam, very fine sandy loam, silty clay loam, or mucky or peaty variants of these textures

Reaction—moderately acid to neutral

Typic Cryaquents

Taxonomic Classification

Typic Cryaquents

Setting

Depth class: very deep

Drainage class: poorly drained

Landform: depressions on terraces, flood plains and

footslopes

Parent material: alluvium, colluvium, loess or

lacustrine sediment Slope: 0 to 5 percent

Elevation: 400 to 1,200 feet (122 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Representative Pedon Location

Map unit in which located: 133—Goldstream peat, 0 to 3 percent slopes

Location in survey area: SE¼, NW¼, Section 3, T1N, R1W, Fairbanks Meridian

Representative Pedon

Typic Cryaquent—on a 3 percent slope at 750 feet (228 m) elevation, under scrub birch and sedge tussock:

Oi—0 to 5 inches (0 to 12 cm); very dark brown (10YR 2/2) sedge and moss peat; many very fine and fine roots; strongly acid (pH 5.2); abrupt smooth boundary.

Oe—5 to 7 inches (12 to 16 cm); black (10YR 2/1) mucky peat; many very fine and fine roots; very strongly acid (pH 5.0); abrupt wavy boundary.

A—7 to 10 inches (16 to 24 cm); very dark brown (7.5YR 2.5/3) silt loam; massive; friable, slightly sticky and slightly plastic; few very fine to medium roots; strongly acid (pH 5.2); abrupt smooth boundary.

ACjjg—10 to 24 inches (24 to 61 cm); dark grayish

brown (2.5Y 4/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; many irregular black (7.5YR 2.5/1) streaks; few very fine and fine roots; moderately acid (pH 5.6); gradual wavy boundary.

Cg—24 to 72 inches (61 to 183 cm); gray (2.5Y 5/1) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; moderately acid (pH 5.6).

Range in Characteristics

Organic layer thickness: 1 to 8 inches (3 to 20 cm) Note: Particle size class is coarse-silty or coarse-loamy.

O Horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Texture—peat, mucky peat, or muck Reaction—moderately acid to neutral

A horizon (when present):

Color—hue from 7.5YR to 2.5Y; value of 2 or 3; chroma from 1 to 3

Texture—silt loam, silty clay loam Reaction—very strongly acid to neutral

Cg horizon:

Color—hue of 2.5Y, 5Y, or N; value of 3 or 4; chroma of 1 or 2

Texture—silt loam, silty clay loam, or stratas of silt loam, very fine sand, loamy sand, or gravel Coarse fragment content—0 to 30 percent Reaction—moderately acid to neutral

2C horizon (when present):
Color—variegated
Texture—sand or fine sand
Coarse fragment content—0 to 50 percent
Gravel content—0 to 50 percent
Reaction—slightly acid to neutral

Typic Cryorthents

Taxonomic Classification

Typic Cryorthents

Setting

Depth class: very deep Drainage class: well drained

Landform: flood plains, terraces, and man-made

features

Parent material: loamy or gravelly fill over alluvium

Slope: 0 to 7 percent

Elevation: 400 to 1,200 feet (122 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3

degrees C)

Representative Pedon Location

Map unit in which located: 184—Typic Cryorthents-Urban land complex

Location in survey area: UTM zone 6, 469107 m E,

7189193 m N

Representative Pedon

Typic Cryorthent—on a level flood plain at 450 feet (137 m) elevation, under a grass lawn:

A—0 to 3 inches (0 to 8 cm); very dark grayish brown (10YR 3/2) gravelly loamy very fine sand; weak fine granular structure; very friable, nonsticky and nonplastic; common very fine and fine roots; 25 percent gravel; neutral (pH 6.6); clear smooth boundary.

C1—3 to 30 inches (8 to 76 cm); light olive brown (2.5Y 5/3) silt loam stratified with very fine sandy loam, sand, and gravel; weak thin platy structure; very friable, nonsticky and nonplastic; few very fine roots; 15 percent gravel; neutral (pH 6.6); gradual smooth boundary.

2C2-30 to 63 inches (76 to 160 cm); light olive

brown (2.5Y 5/3) very fine sandy loam stratified with silt loam; weak thin platy structure; friable, nonsticky and nonplastic; few fine faint gray (2.5Y 6/1) redoximorphic depletions; slightly alkaline (pH 7.5); abrupt smooth boundary.

2C3—63 to 72 inches (160 to 183 cm); light brownish gray (2.5Y 6/2) sand; single grain; loose, nonsticky and nonplastic; slightly alkaline (pH 7.5).

Range in Characteristics

Depth to alluvium: 20 to greater than 60 inches (51 to > 152 cm)

Note: Particle size class is coarse-loamy, loamyskeletal, or sandy. Thin O horizons may be present in some pedons.

A horizon (when present):

Color—value from 2 to 4

Texture—very fine sandy loam and gravelly loamy very fine sand

Gravel content—0 to 35 percent

C horizon:

Color—value from 3 to 5; chroma from 2 to 4
Texture—stratas of loamy very fine sand, very fine sandy loam, loamy sand, and sandy loam
Gravel content—0 to 40 percent
Reaction—neutral to slightly alkaline

2C horizon:

Color—value from 3 to 5; chroma from 2 to 4
Texture—strata of sand, very fine sandy loam,
loamy very fine sand, very fine sand, fine sand,
and silt loam

Gravel content—0 to 50 percent Reaction—neutral or slightly alkaline

Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (Soil Survey Staff, 1999). Soil formation is controlled by genetic and environmental factors of climate (including temperature and moisture effects), topography, parent material, and living organisms—all acting over a period of time. The influence of any one of these factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny, 1941).

The soils of the Greater Fairbanks Area are weakly developed as a result of the cold climate and the relatively young age of the parent materials. Thus, soil properties such as particle size composition and clay mineralogy are largely determined by the properties of the parent material. Parent materials in this area include alluvium. bedrock, and loess. Alluvium (material deposited by water) consists of stratified fine sand and silt underlain at some depth by sand and gravel. The surface alluvium is Holocene in age and flood deposition still occurs. Loess, consisting of windblown silt, covers most unflooded surfaces and is many feet thick in the lowlands. Loess is Pleistocene and Holocene in age and loess deposition continues at present. Loess on lower hillslopes has been redeposited down slope from higher elevations. Metamorphic rocks (mostly schist) and other bedrock of Precambrian age underlie the loess on upper hillslopes (Péwé et al., 1966; Weber et al., 1978). The bedrock is highly weathered in some places, probably due to hydrothermal activity rather than soil formation.

The major soil-forming processes in the Greater Fairbanks Area are accumulation of organic matter at the surface, oxidation and reduction of iron, cryoturbation, and impacts from permafrost and high water tables. Organic matter accumulates on the surface because decomposition cannot keep pace with the annual addition of dead plant material. Decomposition is inhibited by cold temperatures

and, in many places, by wetness and a consequent lack of soil oxygen. Nearly all surfaces, except where floods or humans frequently disturb them, have some surface organic layer. The thickest accumulations of surface organic matter occur on the coldest and wettest soils. For example, wet soils in depressions and in areas with permafrost have the thickest organic surface layer. The warmest and driest soils, which occur on hilltops and on sandy and gravelly flood plains, may have only an inch or two of surface organic matter.

Weathering of primary minerals in soils releases iron, which may be either oxidized or reduced depending on the availability of oxygen. In dry, well-aerated soils iron oxidizes to form a reddish Bw horizon. Bw horizons are best developed in the soils of hillslopes, such as Fairbanks and Steese soils, and are weak or absent in the young soils of flood plains, such as Salchaket and Jarvis soils. In the very wettest soils iron is reduced because of a lack of oxygen, resulting in grayish soil colors. Commonly, alternating wet and dry conditions result in both reduced (grayish) and oxidized (reddish) zones in the soil.

Cryoturbation results in contorted and broken horizons. Cryoturbation is common in soils with permafrost.

Permafrost has several important impacts on soil. Since permafrost is nearly impervious, water perches above the permafrost and saturates the soil. Some permafrost soils contain large amounts of ground ice, and subsidence can occur if surface disturbance results in warming of the soil. Permafrost soils on thick Pleistocene loess deposits (Bolio, Lemeta, Goldstream, Chatanika, Minto, and Histel soils) have the greatest amount of ground ice and hence the greatest risk of thaw subsidence.

The gravel deposits underlying the alluvial plain in the Greater Fairbanks Area are saturated with ground water. In soils such as Piledriver, Eielson, North Pole, and Fubar this ground water is high enough to occur in the soil profile and affect land use.

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Glossary

- **Ablation till.** Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.
- Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.
- Alluvial cone. The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.
- **Alluvial fan.** The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.
- **Alluvium.** Material, such as sand, silt, or clay, deposited on land by streams.
- Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.
- **Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- Aspect. The direction in which a slope faces.

 Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.
- Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	

- **Backslope.** The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.
- **Basal area.** The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet
- Basal till. Compact glacial till deposited beneath the
- Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.
- **Bedrock.** The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.
- **Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- **Boulders.** Rock fragments larger than 2 feet (61 cm) in diameter.
- **Breast height.** An average height of 4.5 feet (1.4 m) above the ground surface; the point on a tree where diameter measurements are ordinarily taken.
- Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.
- **Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- **Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

- Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
- Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 cm) along the longest axis. A single piece is called a channer.
- **Cirque.** A semicircular, concave, bowllike area that has steep faces primarily resulting from glacial ice and snow abrasion.
- Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
- Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.
- Closed depression. A low area completely surrounded by higher ground and having no natural outlet.
- **Coarse fragments.** Mineral or rock particles larger than 2 millimeters in diameter.
- Coarse textured soil. Sand or loamy sand. Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter
- **Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.
- Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 cm) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.
- **COLE** (coefficient of linear extensibility). See Linear extensibility.
- **Colluvium.** Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.
- Complex slope. Irregular or variable slope.
 Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

- Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.
- **Congeloturbate.** Soil material disturbed by frost action.
- Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches (25 cm) and 40 or 80 inches (102 or 203 cm).
- **Corrosion.** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- **Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- **Cryoturbation (frost churning).** The mixing of the soil resulting in irregular or broken horizons, organic matter accumulation on the permafrost table, and oriented rock fragments due to frost action.
- Culmination of the mean annual increment
 - (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- Cutbanks cave (in tables). The walls of excavations

- tend to cave in or slough.
- Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (25 cm).
- Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the Soil Survey Manual.
- **Drainage, surface.** Runoff, or surface flow of water, from an area.
- **Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.
- **Eolian soil material.** Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.
- Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep. Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.
 - Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- **Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.
- **Esker.** A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.
- **Fan terrace.** A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

- **Fertility, soil.** The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.
- Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called normal field capacity, normal moisture capacity, or capillary capacity.
- Fine textured soil. Sandy clay, silty clay, or clay. Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.
- **Flagstone.** A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 cm) long.
- **Flood plain.** A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.
- **Fluvial.** Of or pertaining to rivers; produced by river action, as a fluvial plain.
- **Foothill.** A steeply sloping upland that has relief of as much as 1,000 feet (305 m) and fringes a mountain range or high-plateau escarpment.
- Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- **Forb.** Any herbaceous plant not a grass or a sedge. **Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- **Frost action** (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.
- Fragipan. A loamy, brittle subsurface horizon low in

- porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly
- **Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- **Glacial drift.** Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.
- **Glacial outwash.** Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.
- **Glacial till.** Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.
- Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.
- Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.
- **Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- **Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 mm to 7.6 cm) in diameter. An individual piece is a pebble.
- **Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 cm) in diameter.
- **Ground ice.** Term used to denote bodies of more or less clear ice in permanently frozen ground.

 Ground ice may occur as segregated ice, disseminated ice, and massive ice.
- **Ground water**. Water filling all the unblocked pores of the material below the water table.
- **Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- **Hardpan.** A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica,

calcium carbonate, or other substance.

- Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- Hill. A natural elevation of the land surface, rising as much as 1,000 feet (305 m) above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.
- Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:
 - O *horizon.*—An organic layer of fresh and decaying plant residue.
 - A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.
 - *E horizon.*—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.
 - B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.
 - C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.
 - Cr horizon.—Soft, consolidated bedrock beneath the soil.
 - R layer.—Consolidated bedrock beneath the

- soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.
- **Humus.** The well decomposed, more or less stable part of the organic matter in mineral soils.
- Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.
- **Igneous rock.** Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.
- **Illuviation.** The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.
- **Infiltration.** The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.
- **Infiltration capacity**. The maximum rate at which water can infiltrate into a soil under a given set of conditions.
- Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.
- Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high
	vo. yg

Intermittent stream. A stream, or reach of a stream,

- that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.
- Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.
- **Kame.** An irregular, short ridge or hill of stratified glacial drift.
- **Karst** (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins
- K_{sat}- Saturated hydraulic conductivity. (See Permeability.)
- Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.
- Large stones (in tables). Rock fragments 3 inches (7.6 cm) or more across. Large stones adversely affect the specified use of the soil.
- Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrinkswell potential of soils. It is an expression of the volume change between the water content of the clod at ¹/₃- or ¹/₁₀-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.
- **Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.
- **Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.
- **Loess.** Fine grained material, dominantly of silt-sized particles, deposited by wind.
- **Low strength.** The soil is not strong enough to support loads.
- Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

- **Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.
- **Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.
- **Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
- **Minor component**. A component of limited extent that may or may not be present.
- **Miscellaneous area.** An area that has little or no natural soil and supports little or no vegetation.
- **Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- **Moderately fine textured soil.** Clay loam, sandy clay loam, or silty clay loam.
- **Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- **Moraine.** An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.
- **Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—few, common, and many; size—fine, medium, and coarse; and contrast—faint, distinct, and prominent. The size measurements are of the diameter along the greatest dimension. Fine indicates less than 5 millimeters (about 0.2 in); medium, from 5 to 15 millimeters (about 0.2 to 0.6 in); and coarse, more than 15 millimeters (about 0.6 in).
- Mountain. A natural elevation of the land surface, rising more than 1,000 feet (305 m) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.
- **Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- **Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- **Neutral soil.** A soil having a pH value of 6.6 to 7.3.

(See Reaction, soil.)

- Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.
- **Nose slope.** A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.
- Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.
- **Organic matter.** Plant and animal residue in the soil in various stages of decomposition.
- Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.
- **Pan.** A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.
- **Parent material.** The unconsolidated organic and mineral material in which soil forms.
- **Peat.** Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)
- **Ped.** An individual natural soil aggregate, such as a granule, a prism, or a block.
- **Pedon.** The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square m to 10 square m), depending on the variability of the soil.
- **Percolation.** The movement of water through the soil.
- **Permafrost.** Layers of soil, or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed continuously for two or more years.
- Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is

defined in the *Soil Survey Manual*. In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow	0.0 to 0.01 inch
Very slow	0.01 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	.more than 20 inches

- **Phase, soil.** A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.
- **pH value.** A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)
- Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.
- **Plastic limit.** The moisture content at which a soil changes from semisolid to plastic.
- **Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.
- **Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.
- Potential native plant community. See Climax plant community.
- Potential rooting depth (effective rooting depth).

 Depth to which roots could penetrate if the content of moisture in the soil were adequate.

 The soil has no properties restricting the penetration of roots to this depth.
- **Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.
- **Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.
- Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key

- plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
- Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.
- Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline 9	.1 and higher

Redoximorphic concentrations. Nodules,

concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

- Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.
- Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.
- Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

- **Relief.** The elevations or inequalities of a land surface, considered collectively.
- Residuum (residual soil material).

 Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.
- **Riverwash**. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.
- **Rock fragments.** Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.
- **Root zone.** The part of the soil that can be penetrated by plant roots.
- Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.
- Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.
- **Sand.** As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.
- **Sandstone.** Sedimentary rock containing dominantly sand-sized particles.
- Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
- **Saprolite.** Unconsolidated residual material underlying the soil and grading to hard bedrock below.
- **Saturation.** Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.
- Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.
- Sequum. A sequence consisting of an illuvial

- horizon and the overlying eluvial horizon. (See Eluviation.)
- **Series, soil.** A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.
- **Shale.** Sedimentary rock formed by the hardening of a clay deposit.
- **Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
- **Shoulder.** The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.
- **Side slope.** A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.
- **Silt.** As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
- **Siltstone.** Sedimentary rock made up of dominantly silt-sized particles.
- Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.
- Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
- Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 2 percent
Gently sloping	2 to 4 percent
Moderately sloping.	4 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 45 percent
Very steepM	ore than 45 percent

- **Slope** (in tables). Slope is great enough that special practices are requied to ensure satisfactory performance of the soil for a specific use.
- **Sloughed till.** Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.
- **Soft bedrock.** Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.
- **Soil.** A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.
- Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

- **Solum.** The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.
- Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.
- **Stones.** Rock fragments 10 to 24 inches (25 to 60 cm) in diameter if rounded or 15 to 24 inches (38 to 60 cm) in length if flat.
- **Stony.** Refers to a soil containing stones in numbers that interfere with or prevent tillage.
- **Structure, soil.** The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of

- aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).
- **Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth.
- **Substratum.** The part of the soil below the solum. **Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer.
- **Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.
- Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 cm). Frequently designated as the "plow layer," or the "Ap horizon."
- **Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.
- **Terminal moraine.** A belt of thick glacial drift that generally marks the termination of important glacial advances.
- Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.
- **Terrace** (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.
- **Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and

- clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."
- **Thermokarst.** Subsidence of the ground caused by melting of ground ice.
- **Till plain.** An extensive area of nearly level to undulating soils underlain by glacial till.
- **Tilth, soil.** The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.
- **Toeslope.** The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.
- **Topsoil.** The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.
- **Tuff.** A compacted deposit that is 50 percent or more volcanic ash and dust.
- **Tussock.** A small mound, typically 0.5 to 1 foot (15 to 30 cm) high, consisting of densely packed dead parts of sedges or grasses.

- **Upland.** Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.
- Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.
- **Variegation.** Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.
- Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.
- Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.
- Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Tables

Table 1.—Temperature and Precipitation at Fairbanks, Alaska

	<u> </u>	Temperatur	e (Degrees	s F)	F)			Precipitation (Inches)				
	' 	 	 		ears in	l Average	 		years in will have		l IAverage	
	İ	İ	İ	Max.	l Min.	I number of			1	I number of	l total	
Month	l Average		l Average		l temp.	l growing	l Average		More	l days with	Isnowfall	
	l daily	l daily	I	l greater	llower	l degree	I	than	l than	0.1 inch	1	
	maximum	<u> minimum</u>	<u> </u>	l than	l than	l days*			<u> </u>	or more	<u> </u>	
January	l l -1.6	। -18.5	 -10.0	l l 39	l l -53	1 0	l l 0.47	l l 0.17	I I 0.71	 1	l l 8.8	
February	1 7.2	l -14.4	1 -3.6	42	1 -47	i o	0.41	0.10	0.65	i i	1 8.2	
March	1 23.8	l -1.6	111.1	l 48	l -35	i o	0.38	0.11	0.64	i i	1 6.5	
April	1 41.0	20.4	30.7	64	i -11	i o	0.33	0.11	0.50	i o	1 3.8	
May	1 59.3	1 38.0	1 48.6	l 78	21	l 197	0.61	0.26	0.91	1 1	1 0.5	
June	1 70.1	1 49.5	59.8	88	37	1 594	1.37	0.69	1.96	1 3	0.0	
July	1 72.3	1 52.5	62.4	88	42	l 695	1.85	1.11	1 2.52	4	0.0	
August	1 66.3	47.2	56.8	l 84	1 32	1 520	1.96	0.98	1 2.81	l 5	0.0	
September	1 54.8	36.2	45.5	73	19	l 71	0.95	0.32	1.47	1 3	1.0	
October	1 32.0	18.1	1 25.0	57	-13	I 0	0.92	0.46	1.32	1 2	11.7	
November	1 10.9	l -5.6	1 2.6	40	l -38	l 0	0.81	0.31	1.22	1 2	15.1	
December	l 1.9	-14.7 	-6.4 	l 39 I	-49 	I 0	l 0.86 l	l 0.27	1.39 	2 	14.9 	
Yearly:		 	 	 	 	 	 		 	 	!	
Average	1 36.5	l l 17.3	l l 26.9	 —-	ļ —	_	<u> </u>		ļ —	<u> </u>	ļ —	
Extreme	l l 96	l l -62	<u> </u>	l l 90	l -55	<u> </u>	<u> </u>		ļ —	<u> </u>	ļ —	
Total	ļ —	 —-	<u> </u>	<u> </u>	<u> </u>	2,077	l l 10.91	8.25	1 13.30	1 25	70.4	

Average number of days per year with at least 1 inch of snow on the ground: 191

^{*}A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold: 40.0 degree F). It is calculated for the period between the last and first 28 degree F frost.

Table 2.—Probability of Frost at Fairbanks, Alaska

	i Tempe _ l	Temperature			
Probability	l l 24°F or lower _l	 28°F or lower 	32°F or lower		
Last freezing temperature in spring:		 			
1 year in 10 later than—	l May 1	I May 13 I	May 25		
2 year in 10 later than—	l April 28	I May 9 I	May 22		
5 year in 10 later than—	l April 22	I May 2 I	May 15		
First freezing temperature in fall:		 			
1 yr in 10 earlier than—	September 15	I September 6 I	August 22		
2 yr in 10 earlier than—	September 19	I September 11 I	August 27		
5 yr in 10 earlier than—	September 28	। I September 20 । ।	September 5		

Table 3.—Growing Season at Fairbanks, Alaska

	 Daily Minimum Temperature				
Probability	number of days > 24°F	number of days > 28°F	number of days > 32°F		
9 years in 10	 143	l 124	l 93		
8 years in 10	1 148	130	99		
5 years in 10	1 158	140	1112		
2 years in 10	1 168	1 151	l 125		
1 year in 10	 174 	 156 	 131 		

Table 4.—Acreage and Proportionate Extent of the Area

(An * under "Percent" indicates less than 0.1 percent)

Лар ymbol	Map unit name	Acres	Perce
01	 	3,597	 1.3
	Bradway very fine sandy loam		1.0
	Chatanika mucky silt loam, 0 to 3 percent slopes		3.2
14	Chatanika mucky silt loam, 3 to 7 percent slopes	9,294	3.4
	IChatanika mucky silt loam, 7 to 12 percent slopes		0.5
	IChatanika mucky silt loam, 12 to 20 percent slopes		*
	Chatanika-Goldstream complex Chena very fine sandy loam		3.0
	Dumps, landfill		*
	Dumps, mine		0.9
	Eielson fine sandy loam		1 2.3
2	Eielson-Piledriver complex	6,872	1 2.5
	Eielson-Tanana complex		1 0.5
	Ester peat, 20 to 45 percent slopes		1.0
	Ester peat, very steep		^
	Fairbanks silt loam, 3 to 7 percent slopes		0.5 2.2
	Fairbanks silt loam, 12 to 20 percent slopes		3.6
	Fairbanks silt loam, 20 to 30 percent slopes		1 1.4
	Fairbanks silt loam, 30 to 45 percent slopes		0.2
I	Fairbanks silt loams, strongly sloping and steep	755	0.3
	Fairbanks-Steese complex, 12 to 20 percent slopes		*
	Fairbanks-Steese complex, 20 to 30 percent slopes		0.3
	Fubar-Piledriver complex, occasionally flooded		0.7 0.1
	Gilmore silt loam, 3 to 7 percent slopes		0.1 0.3
	IGilmore silt loam, 12 to 20 percent slopes		1 0.4
	Gilmore silt loam, 20 to 30 percent slopes		1 0.7
)	Gilmore silt loam, 30 to 45 percent slopes		1 0.5
	Gilmore silt loam, 45 to 70 percent slopes		1 0.2
	IGilmore-Ester complex, 12 to 70 percent slopes		0.3
	Gilmore-Steese complex, 3 to 15 percent slopes		0.6
	Goldstream peat, 0 to 3 percent slopes Goldstream peat, 3 to 7 percent slopes		4.3 0.5
	IGoldstream-Histels complex, 0 to 3 percent slopes		1 0.5
	Histels		0.6
	Jarvis fine sandy loam		1 1.1
	Jarvis-Chena complex	2,226	1 0.8
	Jarvis-Salchaket complex		1 8.3
	Lemeta peat		1 1.0
	Liscum-Noonku complex		0.4
	Minto silt loam, 0 to 3 percent slopes		1 2.9
	Minto silt loam, 7 to 12 percent slopes		1 2.3
	Minto-Chatanika complex, 0 to 3 percent slopes		1 1.8
	IMinto-Chatanika complex, 3 to 7 percent slopes		1.7
	IMinto-Chatanika complex, 7 to 12 percent slopes	1,605	1 0.6
	Minto-Chatanika complex, 12 to 20 percent slopes		*
	Mosquito mucky peat		1 0.9
)	Mosquito-Noonku complex		0.4
	Noonku very fine sandy loam		0.6 0.6
	North Pole-Mosquito-Liscum complex		1 0.0
	North Pole-Noonku complex		1 1.2
	Peede silt loam	241	*
	Peede-Mosquito complex		0.3
	Piledriver very fine sandy loam		1 0.2
	Piledriver-Eielson complex		1.6
	Piledriver-Fubar complex		1 1.4
	Pits, quarry		0.5
	Riverwash		0.3
	Salchaket very fine sandy loam		1 2.6
	Salchaket-Typic Cryorthents complex	1,067	1 0.4
	Saulich peat, 3 to 7 percent slopes		1.1
	Saulich peat, 7 to 12 percent slopes		0.3
	Saulich_Minto_complex_3 to 12 percent slopes		1 1.4
	Saulich-Minto complex, 3 to 12 percent slopes		1.4
	Saulich-Minto complex, 12 to 20 percent slopes		1

Table 4. Acreage and Proportionate Extent of the Area--Continued

Map symbol	Map unit name	Acres	l Percent
171		1,124	 0.4
172	ISteese silt loam, 12 to 20 percent slopes	4,721	1.7
173	Steese silt loam, 20 to 30 percent slopes	8,286	1 3.1
174	Steese silt loam, 30 to 45 percent slopes	1,391	1 0.5
175	Steese silt loam, 45 to 70 percent slopes	13	*
176	Steese-Gilmore complex, 12 to 20 percent slopes	1,301	1 0.5
177	Steese-Gilmore complex, 20 to 30 percent slopes	1,471	1 0.5
178	Steese-Gilmore complex, 30 to 45 percent slopes	404	l 0.1
179	Steese-Gilmore complex, 45 to 70 percent slopes	122	*
180	Tanacross peat	2,000	1 0.7
181	Tanana mucky silt loam	13,263	1 4.9
182	Tanana-Mosquito complex	1,299	1 0.5
183	Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils	1,464	1 0.5
184	Typic Cryorthents, pit spoil	1,836	1 0.7
185	Typic Cryorthents-Urban land complex	2,119	1 0.8
186	IUrban land	12,639	1 4.7
187	Water	21,342	7.9
	I Total	269,860	100.0

Table 5. Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol	l l Depth	I USDA texture	l Classificati	on	l _l Liquid	l l Plas-
and soil name	l l	 	l Unified	 AASHTO	l limit l	l ticity l index
	l In.			İ	Pct.	
101:	i	! 	1	i		
Bolio	12-16	IPeat IMucky peat IPermanently frozen mucky peat	PT PT 	A-8 A-8 	0-0 0-0 0-0	NP NP NP
102:			<u> </u>	į . <u>.</u>		
Bradway	7-10 10-26	ISlightly decomposed plant material IMucky silt loam IStratified very fine sandy loam to fine sand IPermanently frozen material	I PT I ML, OL I ML, SM	A-8 A-5 A-4 	0-0 40-50 25-30 	I NP INP-10 INP-5 I —-
103:	į	İ		į	į	
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	I PT I MH, OH I ML I	A-8 A-5 A-4 	0-0 70-100 25-35 	I NP INP-15 INP-5 I —-
104:	į	i de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	i	į.	į	i
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	I PT I MH, OH I ML	A-8 A-5 A-4 	0-0 70-100 25-35 	I NP INP-15 INP-5
105:		I I	 			
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	I PT I MH, OH I ML	A-8 A-5 A-4 	0-0 70-100 25-35 	I NP INP-15 INP-5 I —-
106:		 	 	 	 	
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	PT MH, OH ML 	A-8 A-5 A-4 	0-0 70-100 25-35 	NP NP-15 NP-5
107:	į	i	i	į	į .	į <u>-</u>
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	I PT I MH, OH I ML	A-8 A-5 A-4 	0-0 70-100 25-35 	I NP INP-15 INP-5
Goldstream	9-12 12-20	l Peat, mucky peat l Mucky silt loam l Silt loam l Permanently frozen material	I PT I ML, OL I ML	 A-8 A-4, A-5 A-4	0-0 30-50 25-35 	I I NP INP-10 INP-10 I —-
108:		I 	 	1	 	
Chena	4-9	ISlightly decomposed plant material IStratified fine sand to silt loam, fine sandy loam, fine sand ICoarse sand, sand, very gravelly sand	PT SM, ML GP, SP	A-8 A-4 A-1	0-0 25-30 0-0	NP NP-5 NP
109: Dumps, landfill		 	 			
110: Dumps, mine	 	I ├─- I	 	 —	 —	
111: Eielson	2-49 49-71	I ISlightly decomposed plant material IVery fine sandy loam IStratified silt loam to fine sand IExtremely gravelly sand, gravelly sand, very gravelly sand I	 PT ML ML, SM GP-GM	 A-8 A-4 A-4 A-1	 0-0 25-30 25-30 0-0	I I NP INP-5 INP-5 I NP

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classification	l l Liquid	l l Plas-	
and soil name		 	l Unified	I AASHTO	l limit	l ticity
	_	<u> </u>	! 		Pct.	·
12:	I	1	 		1	1
ielson	0-2	Slightly decomposed plant material	I PT	A-8	0-0	i NP
		IVery fine sandy loam	l ML	A-4	125-30	INP-5
		IStratified silt loam to fine sand	I ML, SM	A-4	25-30	INP-5
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	I GP-GM	A-1	0-0	I NP
Piledriver	0-3	ISlightly decomposed plant material	l PT	l A-8	0-0	l NP
		Stratified fine sand to silt loam, very fine sandy loam	i ML	A-4	25-30	INP-5
		Stratified sand to fine sand to very fine sandy loam	I SM, ML	A-4, A-3	120-25	INP-5
	33-72	ISand, very gravelly sand	IGP-GM, SP-SM	A-1	0-0	l NP
13:		 	l I			-
Fielson	0-2	Slightly decomposed plant material	' I PT	A-8	0-0	i NP
		IVery fine sandy loam	l ML	A-4	125-30	INP-5
		IStratified silt loam to fine sand	I ML, SM	A-4	125-30	INP-5
	71-72	Extremely gravelly sand, gravelly sand,	I GP-GM	A-1	0-0	I NP
		l very gravelly sand	I I			-
Tanana	0-3	Slightly decomposed plant material	I PT	A-8	0-0	i NP
	1 3-6	ISilt loam, mucky silt loam	ML, OL	A-4	30-40	INP-10
		Very fine sandy loam, stratified silt loam to loamy fine sand	l ML	A-4	30-40	INP-10
	1 25-72	Permanently frozen material	1		ļ —-	ļ
114:	i	i I	i I		i	i
Ester	i 0-9	lPeat	I PT	A-8	i 0-0	i NP
		lPermanently frozen mucky silt loam	l ML	A-4	125-30	INP-5
		Permanently frozen very channery silt loam	I GM	A-2, A-4		l NP
	121-72	Permanently frozen weathered bedrock	 		<u> </u> —	ļ
115:	i		i I		i	i
Ester	0-9	lPeat	I PT	I A-8	I 0-0	l NP
		lPermanently frozen mucky silt loam	I ML	A-4	25-30	INP-5
		Permanently frozen very channery silt loam Permanently frozen weathered bedrock	I GM	l A-2, A-4		I NP
			İ		i —	i —
116:	i	İ	İ		i	i
Fairbanks		ISlightly decomposed plant material	I PT	A-8	0-0	I NP
		Silt loam	I ML	A-4	30-40	INP-10
	1 30-72 1	ISilt loam, silt	l ML	A-4	l 25-35	INP-10
117:	i	İ	i		i	i
Fairbanks		ISlightly decomposed plant material	l PT	I A-8	I 0-0	I NP
		ISilt loam	l ML	A-4	30-40	INP-10
	130-72	ISilt loam, silt	l ML	A-4	l 25-35	INP-10
118:	i		İ		i	i
Fairbanks	0-3	ISlightly decomposed plant material	l PT	A-8	I 0-0	l NP
	3-30	ISilt loam	l ML	A-4	30-40	INP-10
	130-72	lSilt loam, silt	I ML	A-4	1 25-35	INP-10
119:	i		İ		i	i
Fairbanks	0-3	Slightly decomposed plant material	i PT	A-8	i 0-0	i NP
	3-30	ISilt loam	l ML	A-4	30-40	INP-10
	30-72	ISilt loam, silt	l ML	A-4	25-35	INP-10
120:	i	1 1	! 		i	i .
Fairbanks	i 0-3	Slightly decomposed plant material	I PT	A-8	i 0-0	i NP
	3-30	ISilt loam	l ML	A-4	30-40	INP-10
	30-72	Silt loam, silt	l ML	A-4	25-35	INP-10
121:	l l	 	! 		I	
rz r. Fairbanks, strongly sloping	0-3	ISlightly decomposed plant material	l PT	l A-8	1 0-0	I NP
, on ongry oroping	3-30	ISilt loam	i ML	A-4	30-40	INP-10
	30-72	Silt loam, silt	l ML	A-4	25-35	INP-10
Fairbanka atas:	1 0 0		 DT	 	1 0 0	
Fairbanks, steep		ISlightly decomposed plant material ISilt loam	I PT	l A-8 l A-4	0-0	I NP INP-10
	3-30 30-72	ISilt loam, silt	I ML I ML	A-4 A-4	30-40 25-35	INP-10
	. 55 12					0

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classification	1	l l Liquid	l l Plas-	
and soil name			l I Unified	I AASHTO	limit	l ticity	
	i In.			 	Pct.	<u> </u>	
22:	i		i	! 	i	i	
Fairbanks	1 3-30	Slightly decomposed plant material Silt loam Silt loam, silt	PT ML ML	A-8 A-4 A-4	0-0 30-40 25-35	NP-10	
Steese	0-2 2-5 5-27	I ISlightly decomposed plant material ISilt loam ISilt, silt loam	 PT ML ML	I A-8 A-4 A-4	 0-0 25-35 25-35	I I NP INP-10 INP-10	
	I	IVery channery silt loam, channery silt loam, extremely I channery silt loam IWeathered bedrock	GM 	l A-2, A-4 l	0-0 —-	NP 	
23:	l I	 	l I	 	1	1	
Fairbanks	3-30	ISlightly decomposed plant material ISilt loam ISilt loam, silt	PT ML ML	A-8 A-4 A-4	0-0 30-40 25-35	NP INP-10 INP-10	
Steese	 0-2	 Slightly decomposed plant material	l I PT	l I A-8	l l 0-0	l I NP	
	2-5 5-27	ISilt loam ISilt, silt loam	ML ML	l A-4 l A-4	25-35 25-35	INP-10 INP-10	
	l 27-33 l	Very channery silt loam, channery silt loam, extremely channery silt loam Weathered bedrock	I GM I	A-2, A-4 	0-0	NP 	
124:	į.		İ	 	İ	İ	
Fubar	2-10	ISlightly decomposed plant material IStratified fine sand to silt loam, very fine sandy loam ISand, extremely gravelly sand, fine sand, very gravelly I coarse sand	 PT ML GP,GP-GM, SP,SP-SM	 A-8 A-4 A-1	0-0 25-30 0-0	NP NP-5 NP	
Piledriver		 	l I PT	 	 0-0	i I NP	
Filedityel	3-15 15-33	Istratified fine sand to silt loam, very fine sandy loam Istratified sand to fine sand to very fine sandy loam Isand, very gravelly sand	ML SM, ML IGP-GM, SP-SM	A-8 A-4 A-4, A-3 A-1	25-30 20-25 0-0	INP-5 INP-5 I NP	
125: Gilmore	 0-3	 ISlightly decomposed plant material	I I PT	 A-8	<u> </u>	į	
dilinore	l 3-6	ISilt loam	l ML	l A-4	30-40	INP-10	
		ISilt loam, silt IVery channery silt loam, extremely channery silt loam IWeathered bedrock	ML GM 	A-4 A-2, A-4 	25-35 	NP-10 NP 	
126:			l I		į		
Gilmore	1 0-3 3-6	Slightly decomposed plant material Silt loam	l PT l ML	l A-8 l A-4	—- 30-40	I —- INP-10	
		ISilt loam, silt IVery channery silt loam, extremely channery silt loam IWeathered bedrock	ML GM 	l A-4 l A-2, A-4 l	25-35 	NP-10 NP 	
127:	i	1		 			
Gilmore	0-3 3-6	ISlightly decomposed plant material ISilt loam	PT ML	l A-8 l A-4	—- 30-40	—- NP-10	
	6-12 12-19	ISilt loam, silt IVery channery silt loam, extremely channery silt loam IWeathered bedrock	I ML I GM	A-4 A-2, A-4	25-35 	INP-10 NP —-	
128:				 	 		
Gilmore	0-3 3-6	ISlightly decomposed plant material ISilt loam	PT ML	l A-8 l A-4	—- 30-40	I —- INP-10	
		ISilt loam, silt IVery channery silt loam, extremely channery silt loam IWeathered bedrock	ML GM 	A-4 A-2, A-4 	25-35 	NP-10 NP 	
129:		 Slightly decomposed plant material	I I I PT	 			
Gilmore	l 3-6	Slightly decomposed plant material Silt loam	l ML	l A-8 l A-4	30-40	INP-10	
		ISilt loam, silt IVery channery silt loam, extremely channery silt loam IWeathered bedrock	ML GM 	l A-4 l A-2, A-4 l	25-35 	NP-10 NP 	

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classification	l l Liquid	l l Plas-	
and soil name			Unified	I AASHTO	l limit	ticity
	\ In.			 	Pct.	¦
30:	I	1	I	 	1	1
30. Gilmore	0-3		' I PT	l A-8	i	i
	l 3-6	Silt loam	l ML	l A-4	130-40	INP-10
	6-12	ISilt loam, silt	ML		25-35	INP-10
		lVery channery silt loam, extremely channery silt loam lWeathered bedrock	I GM I	l A-2, A-4 l	—- —-	NP
31:	I	1		 	1	1
31. Gilmore	0-3		' I PT	l A-8	i	i
	1 3-6	Silt loam	l ML		30-40	INP-10
	6-12	Silt loam, silt	l ML	A-4	25-35	INP-10
	12-19	Channery silt loam, very channery silt loam, extremely	GM	l A-2, A-4		NP
	 10-72	I channery silt loam IWeathered bedrock		 	i	i
	113-72		i	! 	i	i -
Ester	i 0-9	lPeat	i PT	I A-8	0-0	i NP
			l ML	l A-4	125-30	INP-5
		Permanently frozen very channery silt loam	GM	A-2, A-4	ļ —	NP
	121-72	Permanently frozen weathered bedrock	I I	 	ļ —	
32:	i	i	i	i İ	i	i
Gilmore		Slightly decomposed plant material	l PT	A-8	I —-	I —-
	3-6	ISilt loam	l ML		30-40	INP-10
		Silt loam, silt	I ML		25-35 —-	INP-10
		lVery channery silt loam, extremely channery silt loam lWeathered bedrock	I GM	l A-2, A-4 l		NP
	1		i	İ	i	i
Steese		Slightly decomposed plant material	l PT	l A-8	I 0-0	I NP
	1 2-5	ISilt loam	l ML		25-35	INP-10
	5-27	ISilt, silt loam IVery channery silt loam, channery silt loam, extremely	I ML I GM		25-35 0-0	INP-10
	127-33	I channery silt loam	l Givi	A-2, A-4 	I 0-0	
	i 33-72	Weathered bedrock	i	İ	i —-	i —-
100	!	!	Į		!	1
133: Goldstream	 l	I IPeat, mucky peat	I I PT	I I A-8	l 0-0	I I NP
Goldstieam		Mucky silt loam	ML, OL	A-6 A-4, A-5	1 30-50	INP-10
		ISilt loam	l ML	A-4	25-35	INP-10
	20-72	Permanently frozen material	1	 	ļ —	
134:	i	1		 		
Goldstream		lPeat, mucky peat	l PT	I A-8	I 0-0	l NP
		Mucky silt loam	ML, OL	A-4, A-5	30-50	INP-10
		ISilt loam IPermanently frozen material	l ML	l A-4	25-35 —-	INP-10
	12072		i	İ	i	i
135:	į.	<u>I</u>	!	l	1	1
Goldstream		lPeat, mucky peat	l PT	l A-8	0-0	I NP
		IMucky silt loam ISilt loam	I ML, OL I ML	l A-4, A-5 l A-4	30-50 25-35	INP-10 INP-10
			IVIL	7-4		—-
	i	i	i	İ	i	İ
135:		<u> </u>				
Histels		Peat	l PT l PT	l A-8 l A-8	0-0 0-0	NP
		Mucky peat IPermanently frozen mucky peat		I A-0	l 0-0	NP NP
		Permanently frozen material	i	İ	i —	i —
	į.	I	ļ.	l	1	1
36:		 Dest	l DT	 	100	
Llistala	0-12	IPeat IMucky peat	l PT l PT	l A-8 l A-8	0-0 0-0	NP NP
Histels	119-17		1 1 1	, ∧-o	l 0-0	I NP
Histels			1		1 0-0	
Histels	17-26	Permanently frozen mucky peat Permanently frozen material	 	 	 	i —
	17-26	Permanently frozen mucky peat		 		<u> </u>
137:	17-26 26-72 	Permanently frozen mucky peat Permanently frozen material 	 	 	 	—-
Histels	17-26 26-72 0-3	Permanently frozen mucky peat Permanently frozen material	 	 A-8	—- 0-0	—- NP
137:	17-26 26-72 	Permanently frozen mucky peat Permanently frozen material 	 PT ML ML,SM	 A-8 A-4 A-4, A-3	 	—

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	I USDA texture	Classification	l l Liquid	l l Plas-	
and soil name		 	l I Unified	AASHTO	l limit	ticity index
	In.				Pct.	<u> </u>
138: Jarvis	l 3-6 l 6-24	I Moderately decomposed plant material Stratified fine sand to silt loam, very fine sandy loam Stratified sand to fine sand to very fine sandy loam Very gravelly sand	 PT ML ML, SM GP-GM, SP-SM	A-8 A-4 A-4, A-3 A-1	 0-0 25-30 20-25 0-0	I I NP INP-5 INP-5
Chena	 0-4 4-9 9-72	ISlightly decomposed plant material IStratified fine sand to silt loam, fine sandy loam, fine sand ICoarse sand, sand, very gravelly sand	 PT SM, ML GP, SP	A-8 A-4 A-1	 0-0 25-30 0-0	I I NP INP-5 I NP
139:		 			1	l I
Jarvis	l 3-6 l 6-24	IModerately decomposed plant material IStratified fine sand to silt loam, very fine sandy loam IStratified sand to fine sand to very fine sandy loam IVery gravelly sand	PT ML ML, SM IGP-GM, SP-SM	A-8 A-4 A-4, A-3 A-1	0-0 25-30 20-25 0-0	I NP INP-5 INP-5
Salchaket	3-24 24-45	I ISlightly decomposed plant material IVery fine sandy loam IStratified silt loam to fine sand IVery gravelly sand	PT ML ML, SM IGP-GM, SP-SM	A-8 A-4 A-4 A-1	0-0 25-30 25-30 0-0	I NP INP-5 INP-5 I NP
140: Lemeta		I I IPeat IPermanently frozen mucky peat	l I PT I	 A-8 	 0-0 0-0	 NP NP
141: Liscum	3-11 11-15 15-70		I I PT I PT I ML, OL ICL, CL-ML, ML I SC-SM	 A-8 A-8 A-4, A-5 A-4 A-2	 0-0 0-0 30-50 0-30 0-15	I I NP I NP INP-10 INP-5
Noonku	 0-2 2-6 6-47	I IModerately decomposed plant material ISilt loam IStratified sand to fine sand to very fine sandy loam IGravelly sand, extremely gravelly sand, very gravelly sand	 PT ML ML, SM GP-GM	A-8 A-4 A-3, A-4 A-1	 0-0 20-35 20-25 0-0	I I NP INP-10 INP-5 I NP
142: Minto	5-9 9-16	 ISlightly decomposed plant material Silt loam Silt loam, silt Silt loam, silt	 PT ML ML ML	A-8 A-4 A-4 A-4	 0-0 25-40 15-25 15-25	I I NP INP-10 INP-5 INP-5
143: Minto	5-9 9-16	 Slightly decomposed plant material Silt loam Silt loam, silt Silt loam, silt	 PT ML ML ML	 A-8 A-4 A-4 A-4	 0-0 25-40 15-25 15-25	I I NP INP-10 INP-5 INP-5
144: Minto	 0-5 5-9 9-16	 		A-8 A-4 A-4 A-4	 0-0 25-40 15-25 15-25	I NP INP-10 INP-5 INP-5
145: Minto	 0-5 5-9 9-16	I I ISlightly decomposed plant material ISilt loam ISilt loam, silt	 	 A-8 A-4 A-4	 0-0 25-40 15-25	I I NP INP-10 INP-5
Chatanika	 0-4 4-6 6-21	Silt loam, silt Slightly decomposed plant material Mucky silt loam Silt loam Permanently frozen material	I ML I I PT I MH, OH I ML	A-4 A-8 A-5 A-4	15-25 0-0 70-100 25-35 —	INP-5 I NP INP-15 INP-5 I —-

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classificati	l l Liquid	l l Plas-	
and soil name	' 	 	l I Unified I	I	l limit l l	ticity index
	l In.	1	[1	Pct.	1
46:	i	i	İ	i	i	i
Minto		Slightly decomposed plant material	PT	I A-8	0-0	I NP
	5-9 9-16	ISilt loam ISilt loam, silt	I ML I ML	A-4 A-4	25-40 15-25	INP-10 INP-5
		ISilt loam, silt	l ML	A-4	15-25	INP-5
Chatanika	 1 0-4	 Slightly decomposed plant material	l I PT	 A-8	l l 0-0	l I NP
Onatanika	1 4-6	Mucky silt loam	MH, OH	I A-5	70-100	INP-15
		ISilt loam	l MĹ	I A-4	1 25-35	INP-5
	21-72	Permanently frozen material	1	1		<u> </u>
47:	i	i	İ	i	i	i
Minto		Slightly decomposed plant material	PT	I A-8	0-0	NP
	5-9 9-16	ISilt loam ISilt loam, silt	I ML I ML	A-4 A-4	25-40 15-25	INP-10 INP-5
		ISilt loam, silt	I ML	A-4	15-25	INP-5
Chatanika	 	 Slightly decomposed plant material	l I PT	l I A-8	l l 0-0	l I NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	INP-15
	6-21	ISilt loam	l MĹ	A-4	25-35	INP-5
	21-72 	Permanently frozen material	I I	1		
148:	į	<u>i</u>	!	į	į .	i
Minto	0-5 5-9	ISlightly decomposed plant material ISilt loam	I PT I ML	A-8 A-4	0-0 25-40	NP NP-10
		ISilt loam, silt	I ML	A-4 A-4	1 25-40	INP-10
		ISilt loam, silt	i ML	A-4	15-25	INP-5
Chatanika	 0-4	 Slightly decomposed plant material	l I PT	l I A-8	l l 0-0	l I NP
Onatarina	1 4-6	Mucky silt loam	MH, OH	I A-5	70-100	INP-15
		ISilt loam	l ML	I A-4	25-35	INP-5
	21-72 	Permanently frozen material	 		<u> </u> —	
149:	į				İ	İ
Mosquito		Silt loam, very fine sandy loam, stratified silt loam	PT ML	A-8 A-4	0-0 30-40	I NP INP-5
		to loamy fine sand		7-4		
	24-72	IPermanently frozen material	1		!	<u> </u>
150:	i	I 	 			
Mosquito			I PT	I A-8	1 0-0	I NP
	18-24	ISilt loam, very fine sandy loam, stratified silt loam I to loamy fine sand	I ML	I A-4	30-40	INP-5
	24-72	Permanently frozen material	İ		i —	i
Noonku	 1 0-2	 Moderately decomposed plant material	l I PT	l I A-8	l l 0-0	l I NP
NOOTIKU	1 2-6	ISilt loam	l ML	A-4	1 20-35	INP-10
	l 6-47	Stratified sand to fine sand to very fine sandy loam	I ML, SM		120-25	INP-5
	47-72 	Gravelly sand, extremely gravelly sand, very gravelly sand	I GP-GM	A-1 	0-0 	l NP
151:	į	<u>i.</u>	 	į . <u></u>		
Noonku	0-2 2-6	IModerately decomposed plant material ISilt loam	I PT I ML	A-8 A-4	0-0 20-35	NP NP-10
	1 6-47	Stratified sand to fine sand to very fine sandy loam	I ML. SM	A-4 A-3, A-4	120-35	INP-10
		Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	I NP
152:	l l	 	 	1	 	
North Pole		ISlightly decomposed plant material	PT	A-8	0-0	NP
	2-4	Highly decomposed plant material	PT	I A-8	0-0	NP
	4-39 39-72	Stratified fine sand to silt loam Very gravelly sand, extremely gravelly sand, gravelly	SM, ML GP-GM	A-4 A-1	0-30 0-0	INP-10
		coarse sand				
153:	l I	I I	 	1	I I	1
North Pole		ISlightly decomposed plant material	! PT	A-8	0-0	NP
	2-4	Highly decomposed plant material	PT	I A-8	0-0	NP
	4-39 39-72	Stratified fine sand to silt loam Very gravelly sand, extremely gravelly	I SM, ML I GP-GM	A-4 A-1	0-30 0-0	INP-10
		,,,				

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classification	1	l l Liquid	l l Plas-
and soil name	 		l I Unified	I AASHTO	l limit	l ticity
					l Pct.	<u> </u>
153:	!		1		1	1
Mosquito		 Peat	l PT	l A-8	0-0	l NP
Mooquito		Silt loam, very fine sandy loam, stratified silt loam to	i ML	A-4	30-40	INP-5
	I	I loamy fine sand	1		1	1
	24-72	IPermanently frozen material	!		!	ļ —-
Liscum		I IPeat	l PT	l A-8	l 0-0	I I NP
Liscuiii		Muck	i PT	A-8	0-0	I NP
		lMucky silt loam	I ML, OL	A-4, A-5	1 30-50	INP-10
		Stratified silt loam to loamy fine sand	ICL, CL-ML, ML		0-30	INP-10
	1 70-72	IGravelly sandy loam	SC-SM	A-4, A-2	0-15	INP-5
154:	i		i		i	i
North Pole	0-2	ISlightly decomposed plant material	i PT	A-8	i 0-0	i NP
		Highly decomposed plant material	I PT	A-8	0-0	I NP
		Stratified fine sand to silt loam	SM, ML GP-GM	A-4 A-1	0-30 0-0	INP-10 I NP
	1 39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	l GF-GIVI	A-1 	l 0-0	
	i	l	i		i	i
Noonku		Moderately decomposed plant material	I PT	A-8	0-0	I NP
	2-6	Silt loam	ML	A-4	20-35	INP-10
		Stratified sand to fine sand to very fine sandy loam IGravelly sand, extremely gravelly sand, very gravelly sand	I ML, SM I GP-GM	l A-3, A-4 l A-1	20-25 0-0	INP-5 I NP
				,,,,	1	
155:	I	I	1		1	1
Peede		Moderately decomposed plant material	I PT	A-8	0-0	I NP
	2-72 	Silt loam	l ML	A-4	l 20-35	INP-10
156:	i	İ	i		i	i
Peede		lModerately decomposed plant material	l PT	I A-8	I 0-0	l NP
	2-72	ISilt loam	I ML	A-4	20-35	INP-10
Mosquito	ا ا 0-18	I IPeat	l PT	l A-8	l 0-0	I I NP
Mooquito		Silt loam, very fine sandy loam, stratified silt loam	i ML	A-4	30-40	INP-5
		I to loamy fine sand	1		1	1
	24-72	Permanently frozen material	1		! —	ļ
157:	i	! 			i	i
Piledriver	0-3	ISlightly decomposed plant material	i PT	A-8	i 0-0	l NP
		Stratified fine sand to silt loam, very fine sandy loam	l ML	A-4	25-30	INP-5
		Stratified sand to fine sand to very fine sandy loam	SM, ML GP-GM, SP-SM	A-4, A-3 A-1	20-25 0-0	INP-5 I NP
	133-72	Sand, very gravelly sand		1 4-1	1 0-0	
158:	i	İ	i i		İ	i
Piledriver		Slightly decomposed plant material	I PT	A-8	0-0	I NP
		Stratified fine sand to silt loam, very fine sandy loam IStratified sand to fine sand to very fine sandy loam	ML SM, ML	A-4 A-4. A-3	l 25-30 l 20-25	INP-5 INP-5
	33-72	ISand, very gravelly sand	IGP-GM, SP-SM	, -	1 0-0	INF-5
	ĺ	1	1		İ	Ì
Eielson		Slightly decomposed plant material	I PT	A-8	0-0	I NP
		Very fine sandy loam Stratified silt loam to fine sand	ML ML, SM	l A-4 l A-4	25-30 25-30	INP-5 INP-5
		Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-1	0-0	I NP
	1	!	!		!	1
159:		Olimbatha decomposed plant may be in	l DT	 		
Piledriver		Slightly decomposed plant material Stratified fine sand to silt loam, very fine sandy loam	PT ML	l A-8 l A-4	0-0 25-30	I NP INP-5
		Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	120-25	INP-5
		ISand, very gravelly sand	IGP-GM, SP-SM		I 0-0	l NP
F. d		Olimbath and a second and and are the second and a second a second and a second and a second and a second and a second a	l DT	 40		
Fubar		Slightly decomposed plant material Stratified fine sand to silt loam, very fine sandy loam	I PT I ML	l A-8 l A-4	0-0	I NP INP-5
		ISand, extremely gravelly sand, fine sand, very gravelly	I GP, GP-GM,	A-4 I A-1	25-30 0-0	INP-5
	1	coarse sand	I SP, SP-SM		1	1
100	!	!			!	!
160: Pits, gravel	I	1	1] 	I	I
ı no, yıaveı			_	<u> </u>	i —	i —
161:	i	İ	İ		İ	İ
Quarry pits	!	<u></u>	<u> </u>	<u> </u>	! 	I —-
	I	I	1		1	1

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classification	l l Liquid	l l Plas-	
and soil name	 	 	l Unified l	AASHTO	l limit l	l ticity l inde
	In.		i i		l Pct.	
62:	l	 				
Riverwash		<u> </u>	i — i		i	<u>i</u> —-
63:	l I	 				1
Salchaket		Slightly decomposed plant material	i PT i	A-8	0-0	i NP
		Very fine sandy loam	ML	A-4 A-4	25-30	INP-5
		Stratified silt loam to fine sand Very gravelly sand	I ML, SM I IGP-GM, SP-SM I		25-30 0-0	INP-5 I NP
64:					1	
04. Salchaket	0-3	Slightly decomposed plant material	PT I	A-8	0-0	l NP
		IVery fine sandy loam	I ML I	A-4	25-30	INP-5
		Stratified silt loam to fine sand Very gravelly sand	ML, SM GP-GM, SP-SM	A-4 A-1	25-30 0-0	INP-5
				Λ-1	I 0-0	
Typic Cryorthents	0-30	Stratified gravelly loamy sand to gravelly fine sandy I loam to gravelly silt loam	GC-GM	A-2	0-15	INP-5
	1 30-63	Stratified fine sand to silt loam	SC-SM, ML	A-4	l 25-35	INP-1
		IVery gravelly sand, extremely gravelly sand	ISP-SM, GP-GM		0-0	I NP
65:		 			 	
Saulich			i PT i	A-8	i 0-0	i NP
		ISilt loam, mucky silt loam	OL, ML	A-4	30-40	INP-1
	21-72	Permanently frozen material	i i		i —	
66:						
Saulich		IMucky peat, peat ISilt loam, mucky silt loam	PT OL, ML	A-8 A-4	0-0 30-40	NP NP-1
		Permanently frozen material	l OL, IVIL I	Λ-4	I —-	I —-
67:	l	 			1	l
Saulich	i 0-16	Mucky peat, peat	i PT i	A-8	i 0-0	i NP
		ISilt loam, mucky silt loam	OL, ML	A-4	30-40	INP-1
	21-72	Permanently frozen material	i i			
68: Saulich		 Mindage	l PT I	4.0		 NID
Saulicii		ISilt loam, mucky silt loam	I OL, ML I	A-8 A-4	0-0 30-40	I NP INP-1
		Permanently frozen material			ļ —	<u>i</u> —
Minto	 0-5		l PT l	A-8	l l 0-0	l l NP
	l 5-9	ISilt loam	i ML i	A-4	25-40	INP-1
		ISilt loam, silt ISilt loam, silt	I ML I	A-4 A-4	15-25 15-25	INP-5 INP-5
	1			7. 4	1 10 20	
69: Saulich		 Musky post_post	l PT I	A-8	l l 0-0	l l NP
Saulicii	16-21	Silt loam, mucky silt loam	OL, ML	A-6 A-4	30-40	INP-1
		Permanently frozen material			! 	ļ —-
Minto	0-5		l PT l	A-8	l 0-0	l l NP
	l 5-9	ISilt loam	I ML I	A-4	125-40	INP-1
		ISilt loam, silt ISilt loam, silt	I ML I	A-4 A-4	15-25 15-25	INP-5 INP-5
				Λ-τ		
70:				۸٥	1 0 0	 NID
Steese		Slightly decomposed plant material Silt loam	PT	A-8 A-4	0-0 25-35	NP NP-1
	l 5-27	ISilt, silt loam	l ML l	A-4	25-35	INP-1
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	loam, extremely channery slit loam Weathered bedrock			i —	i —-
71.	l I	 				1
71: Steese	l 0-2	I ISlightly decomposed plant material	l PT l	A-8	l 0-0	I I NP
	2-5	ISilt loam	I ML I	A-4	125-35	INP-1
		ISilt, silt loam IVery channery silt loam, channery silt	ML GM	A-4 A-2, A-4	25-35 0-0	INP-1
	21-33 	loam, extremely channery silt loam	GIVI 	A-2, A-4	U-U	111
	:	Weathered bedrock	: :		i —-	i —-

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	l Classificat	ion	l l Liquid	l l Plas-
and soil name		 	l Unified	AASHTO	limit	l ticity
		İ	<u>_</u>	_	l Pct.	<u> </u>
172: Steese			l I PT		l l 0-0	l I NP
Sieese	2-5	ISlightly decomposed plant material ISilt loam	I ML	A-8 A-4	1 25-35	INP-10
		ISilt, silt loam	i ML	i A-4	25-35	INP-10
		Very channery silt loam, channery silt	i GM	A-2, A-4	0-0	I NP
	I	I loam, extremely channery silt loam IWeathered bedrock	1		 	l I —
	1		i	i	i	i
173: Steese	0-2	 Slightly decomposed plant material	l I PT	l I A-8	l l 0-0	l I NP
	1 2-5	ISilt loam	i ML	I A-4	25-35	INP-10
	1 5-27	ISilt, silt loam	l ML	I A-4	125-35	INP-10
	l 27-33	IVery channery silt loam, channery silt	I GM	I A-2, A-4	I 0-0	l NP
	l l 33-72	I loam, extremely channery silt loam IWeathered bedrock			 	
474.	İ		İ	İ	İ	į
174: Steese	l 0-2	I Slightly decomposed plant material	l I PT	I A-8	l 0-0	I I NP
	1 2-5	ISilt loam	l ML	I A-4	125-35	INP-10
		ISilt, silt loam	l ML	I A-4	25-35	INP-10
	27-33	lVery channery silt loam, channery silt	I GM	A-2, A-4	0-0	I NP
	l l 33-72	l loam, extremely channery silt loam lWeathered bedrock	l I		 	
175:	 	1				1
Steese	0-2	ISlightly decomposed plant material	i PT	 A-8	0-0	l NP
	1 2-5	ISilt loam	i ML	I A-4	25-35	INP-10
		ISilt, silt loam	l ML	I A-4	125-35	INP-10
	27-33	IVery channery silt loam, channery silt	I GM	A-2, A-4	0-0	I NP
	l l 33-72	I loam, extremely channery silt loam IWeathered bedrock			 	
470.			İ	İ	İ	İ
176: Steese		I Slightly decomposed plant material	I I PT	I A-8	l 0-0	I I NP
Olococ	1 2-5	ISilt loam	i ML	A-4	25-35	INP-10
		ISilt, silt loam	l ML	I A-4	25-35	INP-10
	l 27-33	IVery channery silt loam, channery silt	I GM	I A-2, A-4	1 0-0	I NP
		I loam, extremely channery silt loam IWeathered bedrock			 	
	I	I	i	i	i	i
Gilmore		Slightly decomposed plant material	l PT	I A-8		
	3-6 6-12	ISilt loam ISilt loam, silt	ML ML	A-4 A-4	30-40 25-35	INP-10 INP-10
		Very channery silt loam, extremely channery silt loam	I GM	A-2, A-4		NP
		Weathered bedrock			į —	j —
177:	i	1 				
Steese		ISlightly decomposed plant material	l PT	I A-8	I 0-0	I NP
	2-5	ISilt loam	l ML	I A-4	25-35	INP-10
		Silt, silt loam Very channery silt loam, channery silt	ML GM	A-4	25-35 0-0	INP-10
	127-33	loam, extremely channery silt loam	I GIVI	I A-2, A-4	l 0-0	I INF
	33-72	Weathered bedrock	į	į	<u>i</u> —	j
Gilmore	0-3	 Slightly decomposed plant material	l I PT	I I A-8	i	i
	1 3-6	ISilt loam	i ML	I A-4	30-40	INP-10
	l 6-12	ISilt loam, silt	l ML	I A-4	125-35	INP-10
		Very channery silt loam, extremely channery silt loam Weathered bedrock	GM	A-2, A-4	—- —-	NP
			i	i	i	i
178: Steese	1 0-2	 Slightly decomposed plant material	l I PT	 A-8	l l 0-0	l I NP
	l 2-5	ISilt loam	i ML	I A-4	l 25-35	INP-10
	1 5-27	ISilt, silt loam	l ML	I A-4	125-35	INP-10
	l 27-33	IVery channery silt loam, channery silt	I GM	I A-2, A-4	I 0-0	I NP
	 33-72	I loam, extremely channery silt loam IWeathered bedrock	I I		 	
Oiles	I	I	 		į	į
Gilmore	0-3 3-6	ISlightly decomposed plant material ISilt loam	PT ML	A-8 A-4	—- 30-40	—- NP-10
		ISilt loam, silt	I ML	I A-4	1 25-35	INP-10
		Very channery silt loam, extremely channery silt loam	I GM	A-2, A-4		NP
		lWeathered bedrock	1	1 '	i —	i —-

Table 5. Engineering Index Properties—Continued

Map symbol	l l Depth	USDA texture	Classification	l l Liquid	l l Plas-	
and soil name		 	l I Unified	AASHTO	l limit	ticity index
	l In.				Pct.	
179:	i	1	 		i	i
Steese		ISlightly decomposed plant material	l PT	A-8	0-0	l NP
	1 2-5	ISilt loam	l ML		25-35	INP-10
	5-27 27-33	ISilt, silt loam IVery channery silt loam, channery silt	I ML I GM	A-4 A-2, A-4	25-35 0-0	INP-10
	127 00	I loam, extremely channery silt loam	I	7,7,4	1	'
	33-72	lWeathered bedrock			!	ļ —-
Gilmore	 - 0-3	 Slightly decomposed plant material	l I PT	A-8	i —-	
amnoro	1 3-6	ISilt loam	i ML	A-4	30-40	INP-10
		ISilt loam, silt	l ML	A-4	125-35	INP-10
		Very channery silt loam, extremely channery silt loam Weathered bedrock	I GM	A-2, A-4	—- —-	I NP
	1		i		i	i
180: Tanacross	 - N-0	l IPeat	l I PT	A-8	l l 0-0	l I NP
Tariacioss	-1 0-9 9-11	Mucky silt loam	I ML, OL	A-6 A-4	1 30-40	INP-10
		Stratified fine sandy loam to silt loam	I ML	A-4	0-40	INP-10
	17-72	Permanently frozen material			ļ —	ļ —-
181:	i	1	 		i	i
Tanana		ISlightly decomposed plant material	l PT	A-8	I 0-0	l NP
	1 3-6	Silt loam, mucky silt loam	ML, OL	A-4	30-40	INP-10
		Very fine sandy loam, stratified silt loam to loamy fine sand IPermanently frozen material	l ML I	A-4	30-40 —-	INP-10
182:	1				1	I
Tanana	-l 0-3		l PT	A-8	l 0-0	I I NP
Tanana	1 3-6	Silt loam, mucky silt loam	ML, OL	A-4	30-40	INP-10
		Very fine sandy loam, stratified silt loam to loamy fine sand	l ML	A-4	30-40	INP-10
	125-72	Permanently frozen material	 		—- 	
Mosquito			l PT	A-8	0-0	l NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam	l ML	A-4	30-40	INP-5
	l 24-72	I to loamy fine sand IPermanently frozen material			i —	i
400	İ		İ		į	İ
183: Typic Cryaquents	। -। 0-6	 Moderately decomposed plant material	l I PT	A-8	l 0-0	I I NP
Typio Oryaquomo		ISilt loam	i ML	A-4	25-40	INP-10
Histic Cryaquepts	 - 0-13	 Mucky neat_muck	l I PT	A-8	 0-0	l I NP
Thous Gryadaopie		Very fine sandy loam, silt loam	I ML	A-4	1 25-35	INP-10
		IVery fine sandy loam, silt loam	ML, SM	A-4	25-35	INP-10
Terric Cryofibrists	∣ - 0-28	l Peat	l I PT	A-8	l l 0-0	I I NP
. cc c.yez.ie.e	128-40		I PT	A-8	1 0-0	l NP
	40-72	Silt loam, very fine sandy loam, silty clay loam	CL, ML	A-5	30-45	INP-30
184:			i I		İ	1
Typic Cryorthents		Slightly decomposed plant material	l PT	A-8	0-0	I NP
	1-49 49-72	Stratified fine sand to silt loam Very gravelly sand, extremely gravelly sand	ML, SC-SM GP-GM	A-4 A-1	25-35 0-0	INP-10 I NP
			1			
185: Typic Cryorthents, Fill	- 0-30 	 Stratified gravelly loamy sand to gravelly fine sandy	I I GC-GM	A-2	 0-15	I INP-5
Typic Oryonnems, Till		loam to gravelly silt loam	l do-divi	A-2		
		IStratified fine sand to silt loam	SC-SM, ML	A-4	25-35	INP-10
	63-72	Very gravelly sand, extremely gravelly sand	ISP-SM, GP-GM	A-1	0-0 	l NP l
Urban land	-	<u> </u>	!	_	ļ —	ļ —-
186:		 	 			1
Urban land	-i —-		i —		i —	i —-
	1	!	!		1	I
197·	1					
187: Water	- —-	 	 	_ _	i —-	i —-

Table 6. Engineering Sieve Data

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	l IDepth I	I USDA texture	Fragme >10	nts 3-10		entage pa ve numbe			 Sand 	l Silt 	l l Clay l
and con name	į	 	inches	linches	4 	10	l 40	200	i i	į	į į
	l In.	 	Pct.	Pct.	' 	i	 	i	Pct.	Pct.	Pct.
01:	 0.12	 Post	į	į	į	į	į	į	į	į	į
Bolio		lPeat IMucky peat	<u> </u>	i —	—- —-	i	— —	i	i —-	<u> </u>	<u> </u>
		Permanently frozen mucky peat	<u>i</u> —	<u>i</u> —	<u>i</u>	<u>i</u> —	<u>i</u> —	i	<u>i</u> —	i	i—
02: Bradway	10.7		į	i i—		į	i i —-	į		į	į
Slauway	0-7 7-10	ISlightly decomposed plant material IMucky silt loam	1 0		1 100	1 100	195-100	175-90	115-50	150-85	10-5
		Stratified very fine sandy loam	10	1 0		195-100		140-65		110-50	
	1	I to fine sand IPermanently frozen material	I I —-	I I —-	 —-	l 	l 	 	l 	l 	<u> </u>
03:	I I	 	İ	İ	i I	i I	i I	İ	i I	İ	i i
oo. Chatanika	0-4		i	i	i —-	i —-	i —-	i	i —-	i	i—
	14-6	Mucky silt loam	i o	i o	i 100	i 100	90-100	180-95	110-50	50-80	0-10
	6-21	ISilt loam	10	10	100	100	190-100	180-95	110-50	150-80	0-10
	21-72 	Permanently frozen material	—- 		—- 	—- 	—- 		—- 	 	
04:			!	!	!	!	!	ļ.	!	!	!
Chatanika		ISlightly decomposed plant material IMucky silt loam	I —- I 0	 0	 100	 100	—- 90-100	—- 80-95	110.50	1 —- 150-80	—-
	6-21	ISilt loam	10			1 100	190-100	180-95		150-80	
		Permanently frozen material		<u> </u>	I —-	ļ —-		—-			
05:	į.,	<u>i</u>	į	į	į	į		į	į	į	į
Chatanika		Slightly decomposed plant material		I —-							
	4-6 6-21	lMucky silt loam ISilt loam	0 0			100 100	190-100 190-100	180-95 180-95		150-80 150-80	
		Permanently frozen	1—-	i —-	l —-	1	I —-	I —-	I —-	I —-	I —-
	į .	material	į	į	į	į	į į	į	İ	į	į
106:		1						!		į	
Chatanika		Slightly decomposed plant material Mucky silt loam	I —- I 0	I —- I 0	—- 100	 100	—- 90-100	1 —- 180-95	110.50	1 —- 150-80	—-
	1 6-21	ISilt loam	10	1 0		1 100	190-100	180-95		150-80	
		Permanently frozen material	<u> </u> —	<u> </u>	ļ —-	<u> </u> —-			<u> </u>		<u> </u>
107:	i	İ	i					i	İ		
Chatanika		Slightly decomposed plant material		I —-	l —-					I —-	I —-
	4-6 6-21	lMucky silt loam Silt loam	0 0			100 100	190-100 190-100	180-95 180-95		150-80 150-80	
		Permanently frozen material	<u> </u> —-	<u> </u> —-	l —-			—-			<u> —</u>
Goldstream	0-9	Peat, mucky peat	 	 	 —-	 	 	 	 	 	
	19-12	Mucky silt loam	10				195-100	175-90		150-80	5-10
	12-20 20-72	ISilt loam IPermanently frozen material	0 —-	0 —-	100 —-	100 —-	95-100 —-	75-95 —-	10-45 —-	50-80 	5-10 -
108:	l I	1			 	 	 	 	 	 	
Chena	0-4	Slightly decomposed plant material	i —	i —-	i —-	i —-	i —-	i —	i —-	i —	i —-
	14-9	Stratified fine sand to silt loam,	10	1 0	190-100	190-100	170-90	135-70	145-90	110-50	l 0-5
	l l 9-72	I fine sandy loam, fine sand ICoarse sand, sand, very gravelly sand	 0	 0	l 145-95	l 130-90	l l15-65	l l 0-15	l 185-100	l l 0-15	ا 10-5
09:	l I	1	1	1	 	1	 	1	l I	1	l I
Dumps, landfill	<u>i</u> —-	<u> </u>	<u></u>	<u>i</u> —	<u>i</u> —	<u></u>	<u>i</u> —	<u>i</u> —	<u>i</u> —	<u></u>	İ
10:		i	İ								
Dumps, mine											
111:			į	į	į	į	į	į	į	į	į
Eielson		Slightly decomposed plant material		I —-	—- 100	I —-	100 100	 65.75	—- 50.77	112 45	
	l 2-49 l49-71	IVery fine sandy loam IStratified silt loam to fine sand	1 0 1 0	0 0		100 95-100	190-100 185-95	165-75 140-65		13-45 10-50	
	11011										
	171-72	Extremely gravelly sand, gravelly sand,	I 0	115-30	150-80	130-80	120-30	l 5-10	186-100	0-14	l 0-5

Table 6. Engineering Sieve Data—Continued

Map symbol	l IDepth	USDA texture	Fragme			entage pa ve numb			 Sand	l Silt	l Clay
and soil name		1	>10 inches	l 3-10 linches	4	10	40	1 200	.! 		
	 In.	 	I I Pct. I	Pct.	 	. ! 	 		l l Pct.	Pct.	l l Pct.
l 12: Eielson			! !	į	į	į	į	į	į		į
Eleison	1 0-2 2-49	Slightly decomposed plant material	l 0	10	1 100	1 100	190-100	165-75	1—- 150-77	113-45	—- 5-10
	149-71		1 0		1 100	195-100		140-65		110-50	
			0 		50-80 	30-80 	20-30 		86-100 		
Piledriver			 	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	3-15 	I very fine sandy loam	l 0 l	0 	100 	100 	70-100 	40-95 	45-80 	10-50 	5-10
	15-33 	Stratified sand to fine sand to very fine sandy loam	l 0 l	0 	100 	100 	40-100 	5-55 	45-80 	10-50 	0-10
	33-72	Sand, very gravelly sand	l 0	0 	155-90 I	125-85 I	110-60	10-20	185-100	0-15 	0-5
113: Fiologo	; 0-2			į	į	į	į	į	į	į	į
Eielson	1 0-2 2-49	Slightly decomposed plant material	l —- I 0	10	—- 100	1 100	190-100	165-75	1 —- 150-77	113-45	—- 5-10
	149-71		1 0		1 100	195-100				110-50	
	71-72 	IExtremely gravelly sand, gravelly sand, I very gravelly sand	0 	15-30 	50-80 	30-80 	20-30 	5-10 	86-100 	0-14 	0-5
Tanana	0-3	Slightly decomposed plant material	—-	i —-		i —-	—- 05 100	i —- 175-90	 	i —-	
	3-6 6-25	Very fine sandy loam, stratified	0 0		100 100	100 100	95-100 85-100	175-90		50-80 10-50	
	 25-72	l silt loam to loamy fine sand IPermanently frozen material	 	ļ	ļ	ļ	<u> </u>	ļ	ļ	<u> </u>	<u> </u>
114:			 								
Ester		Peat	I —-	I —-				—-		I —-	
	9-12 12-21	IPermanently frozen mucky silt loam IPermanently frozen very	0 0		l 100 l40-65	100 15-55	190-100 115-55	170-90 110-50		150-80 150-80	
	1	I channery silt loam IPermanently frozen weathered bedrock	ĺ	 	 	 	 	 	 	 	
115:	İ	 	 	I I	i I	I I	i I	i I	l l	İ	l l
Ester	0-9	lPeat	i —-	i —-	i —-	i —-	i —-	i —-	i —	i	i —-
	9-12		1 0		100	1 100	190-100	170-90		150-80	
	12-21		10	135-45	140-65	115-55	115-55	110-50	115-50	150-80	10-5
	21-72	channery silt loam Permanently frozen weathered bedrock	<u> </u>	ļ	ļ	<u> </u>	<u> </u>	ļ	<u> </u>	ļ	<u> </u>
116:							į				
Fairbanks	1 0-3 3-30	Slightly decomposed plant material	I —- I 0	I —- I 0	1 100	—- 100	—- 90-100	1 —- 180-90	—- 10-45	1 —- 150-80	—- 5-10
			1 0		100	1 100	190-100	180-95		150-100	
117:			! !	į		į					
Fairbanks		Slightly decomposed plant material Silt loam	I —- I 0	I —- I 0	 100	 100	—- 90-100	1 —- 180-90	—- 10-45	1 —- 150-80	—- 5-10
			1 0		100	1 100	190-100	180-95		150-80	
118:			! 	-	-		-	-	-		
Fairbanks	0-3 3-30	ISlightly decomposed plant material ISilt loam	l —- I 0		 100	 100	—- 90-100	1 180-90	 -	1 —- 150-80	—- 5-10
		ISilt loam, silt	1 0		1 100	1 100	190-100	180-95		150-60	
119:			 								
Fairbanks	0-3 3-30	Slightly decomposed plant material Silt loam	I —- I 0	I —- I 0	—- 100	—- 100	—- 90-100	—- 80-90	—- 10-45	—- 50-80	—- 5-10
		Silt loam, silt	1 0		100	1 100	190-100	180-90		150-80	
120:			! 	-				-	-		
Fairbanks	0-3 3-30	Slightly decomposed plant material Silt loam	l —- I 0	I —- I 0	—- 100	—- 100	—- 90-100	—- 80-90	—- 10-45	—- 50-80	15.10
			1 0		1 100	1 100	190-100	180-90		150-80	
	i -	1	1	1	1	1		1	1		-

Table 6. Engineering Sieve Data—Continued

Map symbol	l IDepth	USDA texture	Fragme		Percentage passing sieve number—				l I Sand I	 Silt	l l Clay
and soil name		 	>10 inches	l 3-10 linches	 4	10	40	1 200	 		
	In.		Pct.	Pct.				·	Pct.	Pct.	Pct.
21:		i									
Fairbanks, strongly sloping		Slightly decomposed plant material	! 	I —	I —-	I —-	I —-	I —-	! 	I —-	!
	3-30	Silt loam	1 0	10		100	190-100	180-90		150-80	
	130-72	Silt loam, silt	0 	0 	1 100	100 	190-100	180-95	1 0-50	150-100) 0-10
Fairbanks, steep	0-3	Slightly decomposed plant material	i	i	i	i —-	i—	i	i—	i	i —-
., ,	3-30	ISilt Ioam	10	10	1 100	1 100	190-100	180-90	110-45	150-80	5-10
	130-72	Silt loam, silt	1 0	1 0	100	100	190-100	180-95	0-50	150-100	0 0-10
22:	-	1		!	!	!	!	!	!	!	!
22: Fairbanks	l		i	i	i	i	i	i	i	i	i
andania	13-30	Silt loam	i 0	i o	100	100	90-100	180-90	10-45	150-80	5-10
	130-72	Silt loam, silt	10	10		1 100	190-100	180-95		150-100	
_	1		1	1	1	1	1	1	1	1	1
Steese		Slightly decomposed plant material	I —-	I —-						•	l —-
	12-5	Silt loam	1 0	10		100	190-100 190-100	180-90 180-90		150-80	
	l 5-27 l27-33	ISilt, silt loam IVery channery silt loam, channery silt	0 0	0 0-40		100 15-55	115-55	110-50		150-100 150-80	
		loam, extremely channery silt loam	1	10-40		113-33	113-33	110-30	113-30	150-60	l 0-3
	133-72	Weathered bedrock	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	!	!	1	!	!	!	1	1	!	1	I
123:	100				1	1	1	1		1	
Fairbanks	13-30	Slightly decomposed plant material Silt loam	10	10	1 100	1 100	190-100	180-90	110-45	150-80	—- 5-10
		Silt loam, silt	1 0	10		100	190-100	180-95			0 0-10
	1	1	i	i	İ	İ	1	I	l	I	1
Steese		Slightly decomposed plant material	I —-	I —-	I —-	I —-	I —-	I —-	l —-	I —-	I —-
	12-5	Silt loam	10	10		100	190-100	180-90		150-80	
	15-27	Silt, silt loam	1 0	0		100	190-100	180-90		150-100	
	127-33	Very channery silt loam, channery silt	1 0	30-40	140-65	115-55	115-55	110-50	115-50	150-80	10-5
	133-72	I loam, extremely channery silt loam IWeathered bedrock	i	i	i	i	i	i	i —-	i —-	i
	1		İ	i	i	i	i	i	i	i	i
124:			!	!	!	!	!	!	!	!	!
Fubar		Slightly decomposed plant material	I —-	1	I —-	100.100	I —-	I —-	—-	100.50	I —-
	2-10	Stratified fine sand to silt loam, very I fine sandy loam	0 	10	195-100	190-100	150-100	125-80	145-75 I	120-50	15-10 1
	10-72	Sand, extremely gravelly sand, fine	i 0	ĺΟ	 48-90	15-85	15-35	0-10	185-100	0-15	0-5
	1	I sand, very gravelly coarse sand	1	1	I	I	I	1	I	1	I
D			ļ	!	!	!	!	!	!	1	ļ .
Piledriver	10-3 13-15	ISlightly decomposed plant material IStratified fine sand to silt loam,			 100	 100	—- 70-100	—- 40-95	—-	10-50	—-
	13-15	I very fine sandy loam	1 0	1 0	1 100	1 100	170-100	140-95	145-60	110-50	1 5-10 1
	15-33	Stratified sand to fine sand to	i o	ĺΟ	100	100	40-100	5-55	 45-80	110-50	0-10
	İ	I very fine sandy loam	İ	İ	İ	ĺ	İ	Ī	l	Ī	ĺ
	133-72	ISand, very gravelly sand	1 0	1 0	155-90	125-85	110-60	0-20	185-100	0-15	0-5
125:	1		1			1		1		!	l I
Gilmore	0-3	Slightly decomposed plant material	i	i	i	i	i—-	i	i	i	i —-
G6	3-6	Silt loam	i o	i o	i 100	I 100	190-100	180-90	15-50	150-80	0-5
	l 6-12	Silt loam, silt	Ι 0	10		100	185-95	175-85	l 0-50	150-100	
	112-19	Very channery silt loam,	1 0	130-50	135-65	115-55	115-55	110-50	115-50	150-80	0-5
		l extremely channery silt loam	1	!	!	!	!	!	!	!	!
	119-72	lWeathered bedrock	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	ļ	<u> </u>	ļ —-	
126:	i	i	i	i	i	i	i	i	i	i	i
Gilmore	0-3	Slightly decomposed plant material	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	13-6	Silt loam	10	10		100	190-100	180-90		150-80	
	6-12	Silt loam, silt	10	1 0		100	185-95	175-85		150-100	
	112-19	IVery channery silt loam,	1 0	130-50	135-65	115-55	115-55	110-50	115-50	150-80	0-5
	 19-72	l extremely channery silt loam lWeathered bedrock	İ	i —	i	i —-	i —-	i	i —-	i —-	i i —-
			i	i	i	i	i	i -	i	i	i
127:	1	L	1	1	I	I	I	1	I	1	
Gilmore	0-3	Slightly decomposed plant material	I —-								l —-
	13-6	Silt loam	1 0	10		100	190-100	180-90		150-80	
	6-12 12-19	ISilt loam, silt IVery channery silt loam,	0 0	l 0 l30-50		100 15-55	185-95 115-55	175-85 110-50		150-100 150-80	
	112-19	l extremely channery silt loam	l	 		10-00	 	10-50	10-50	150-80	0-3
	19-72	IWeathered bedrock	i —-	i —	i —-	i —-	i	i —	i —-	i	i —-
	1			1	1	1	1	1	1	1	1

Table 6. Engineering Sieve Data—Continued

Map symbol	l Depth	USDA texture	Fragme			entage p ve numb			Sand	l Silt	Clay
and soil name	 	 	>10 inches	l 3-10 linches		10	40	200	! 	 	!
	 In. 	- ' 	l Pct.	Pct.		 		 	Pct.	Pct.	l Pct.
28:	i	i	i	i	i	i	i	i	i	i	i
Gilmore		Slightly decomposed plant material	l —-	! 	!	!	l —-	I—	!	!	!
	3-6		10		100	1 100	190-100	180-90		150-80	
	6-12 12-19		0 0		l 100 l35-65	100 15-55	185-95 115-55	175-85 110-50		150-100 150-80	
		l extremely channery silt loam	1			113-33		110-30	 	150-60	U-3
	119-72	Weathered bedrock	<u> </u> —-	i	<u>i</u> —	<u>i</u> —	i	<u>i</u> —	<u>i</u> —-	<u>i</u> —	<u> </u> —-
29:			 	1	 	1			 	1	
Gilmore	0-3	Slightly decomposed plant material	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —	i —-
	l 3-6	Silt loam	10		1 100	1 100	190-100	180-90	115-50	150-80	l 0-5
	6-12	· · · · · · · · · · · · · · · · · · ·	10		1 100	1 100	185-95	175-85		150-100	
	112-19	Very channery silt loam,	10	130-50	135-65	115-55	115-55	110-50	115-50	150-80	0-5
	119-72	l extremely channery silt loam lWeathered bedrock	 	i	i —-	i —-	i	i	 	i	
	į		İ	İ	į	İ	İ	İ	İ	į	İ
30: Gilmore	l 0-3	 Slightly decomposed plant material	l —-	i	i	<u> </u>	<u> </u>	l	 	<u> </u>	 —-
	13-6	Silt loam	I 0		i 100	i 100	190-100	180-90	15-50	150-80	0-5
	l 6-12	Silt loam, silt	I 0	10	l 100	1 100	185-95	175-85	0-50	150-100	0-5
	112-19	, ,	1 0	130-50	135-65	115-55	115-55	110-50	115-50	150-80	l 0-5
		l extremely channery silt loam	ļ .	1	!	!	!	!	!	!	ļ .
	119-72 	Weathered bedrock	—- 		<u> </u>				—- 		
31:	į	İ.,	İ	İ	İ	İ	İ	İ	İ	İ	ĺ
Gilmore		Slightly decomposed plant material		 -							
	3-6 6-12		0 0		100 100	100 100	190-100 185-95	180-90 175-85		150-80 150-100	
	112-19		1 0		135-65	115-55	115-55	110-50		150-100	
	i	I loam, extremely channery silt loam	İ		I		1	1	1		
		Weathered bedrock	l —-	l —-	l —-	l —-	l —-	l —-	l —-	l —-	l —-
Ester		lPeat	l —-						I —-		I —-
			10		100	1 100	190-100	170-90		150-80	
	112-21	Permanently frozen very channery silt loam	0 	135-45 I	140-65 I	15-55 	15-55 	110-50	115-50 I	150-80 I	l U-5
	121-72	Permanently frozen weathered bedrock	i —-	i —-	i —-	i —-	i —	i —-	i —-	i —-	i —-
32:	l		1	1					 		
Gilmore	0-3	 Slightly decomposed plant material	i	i	i—-	i —-	i	i	i	i	i
	l 3-6		10	10	1 100	1 100	190-100	180-90	115-50	150-80	
	6-12		10		100	100	185-95	175-85		150-100	
	12-19	IVery channery silt loam, I extremely channery silt loam	10	130-50	135-65	115-55	115-55	110-50	115-50	150-80	10-5
	119-72	Weathered bedrock	i	i	i	i	i	i	 	i	i
n.			ļ.	Į.	ļ.	!	!	!		!	!
Steese	0-2 2-5	Slightly decomposed plant material Silt loam	I —- I 0	1 0	1 100	1 100	—- 90-100	180-90	115.50	150-80	105
	15-27	Silt loam	10		1 100	1 100	190-100	180-90		150-80	
		· · · · · · · · · · · · · · · · · · ·	10		140-65	115-55	115-55	110-50		150-80	
	1	I loam, extremely channery silt loam	1	1	1	1	1	1	I	1	
	33-72	Weathered bedrock	ļ	!	ļ		ļ	<u> </u>			
33:	i	i	i	i	i	i	i	i	i	i	i
Goldstream		lPeat, mucky peat	l —-	! —-	I —	l —-	l —	ļ —-	l —-	ļ —-	l —-
	9-12	Mucky silt loam	10		100	100	195-100	175-90		150-80	
	12-20 20-72	Silt loam Permanently frozen material	0 —-		100 —-	100 —-	95-100 	175-95 1 —	110-45	150-80	5-10 -
			i	i	i	i	i	i	i		i
34:		 Post_music_nest	1	1			1	1			
Goldstream	0-9 9-12	lPeat, mucky peat lMucky silt loam	 0		—- 100	—- 100	l —- 195-100	—- 75-90	—- 10-45	—- 50-80	—- 5-10
	19-12	Silt loam	10		1 100	1 100	195-100	175-90		150-80	
		Permanently frozen material	i —-		I —-	I —-			—-		
	1		İ	İ	İ	İ	i	i	İ	i	İ

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	l IDepth	USDA texture	Fragme >10	ents 3-10	Percentage passing sieve number—				l I Sand I	l Silt 	l Clay
and son name	į	1 	linches		 4	10	40	200		<u> </u>	
	 In.		Pct.	Pct.	<u> </u>		<u> </u>	¦	Pct.	Pct.	Pct.
35:			!	!	!			!	!	!	! !
Goldstream		Peat, mucky peat	I —-	I —-	I —-	I —-	—-		—-	I —-	
	9-12	Mucky silt loam	10	10		100	195-100	175-90		150-80	
	112-20	ISilt loam	10	10		100	195-100	175-95	110-45	150-80	5-10
	120-72	Permanently frozen material	ļ —-	ļ	ļ	—-	<u> </u>		<u> </u>		<u> </u>
istels	0-12	lPeat	i	i —-	i —-	i —-	i	i —-	i —	i —	i —-
	112-17	Mucky peat	I —-	I —-	I —-	I —-	I —-	I —	I —-	I —-	I —-
	117-26	Permanently frozen mucky peat	I —-	l —-	l —-	I —-	l —-	l —-	l —-	l —-	I —
	26-72	Permanently frozen material	ļ —-	ļ	ļ —-	ļ —-	ļ —-	ļ —-	<u> </u>	ļ —-	!
36:	i	1		1	<u> </u>	i i	i i	<u> </u>			!
listels	i 0-12	IPeat	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	112-17	Mucky peat	I —-	I	I —-	l —-	l —-	I —-	l —-	I	I —-
	117-26	Permanently frozen mucky peat	I —-	l —-	I —-	I —-	I —	I —-	I —-	I —-	I —-
	26-72	Permanently frozen material	!	!	!	! 	!	!	!	!	!
37:	l I		1	1	1	 	l I		1	1	
arvis	0-3	Moderately decomposed plant material	i	i	i	i —-	i —-	i	i	i	i —-
	13-6	IStratified fine sand to silt loam,	I 0	10	l 100	100	150-100	10-100	145-80	110-50	5-10
		I very fine sandy loam				1 100			145.00	110.50	10.1
	l 6-24	Stratified sand to fine sand to very fine sandy loam	0 	0 	l 100	100 	70-100 	5-75 	145-80 I	110-50	U- I(
	124-72	IVery gravelly sand	i o	i o	35-90	130-80	10-60	i 0-20	185-100	0-15	0-5
	ļ.	!	!	!	!	!	!	!	!	!	!
38:	0-3		1	1	1		1	1		1	
arvis	13-6	IModerately decomposed plant material IStratified fine sand to silt loam,	I —- I 0	10	1 100	1 100	 50-100	0-100	1—- 145-80	10-50	— 5-1
	1	I very fine sandy loam	Ī	i	1	1		1	145 00	110 50	1
	l 6-24	IStratified sand to fine sand to	10	10	1 100	100	170-100	15-75	145-80	110-50	0-1
		l very fine sandy loam									
38:	24-72 	Very gravelly sand	0 	0 	135-90 I	130-80 I	110-60 I	1 0-20 1	185-100	I 0-15	1 0-5 1
Chena	i 0-4	Slightly decomposed plant material	i —	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	l 4-9	IStratified fine sand to silt loam,	I 0	1 0	190-100	190-100	170-90	135-70	145-90	110-50	l 0-5
		I fine sandy loam, fine sand									
	9-72 	Coarse sand, sand, very gravelly sand	10	1 0	145-95 I	130-90	115-65 I	10-15 1	185-100	I 0-15	1 0-5 1
39:	i	i	i	i	i	i	i	i	i	i	i
arvis		Moderately decomposed plant material	I —	I —-	I —-	l —-	I —-	I —-	I —-	I —-	I —-
	3-6	Stratified fine sand to silt loam,	10	10	100	100	50-100	0-100	145-80	110-50	5-1
	ا ا 6-24	I very fine sandy loam IStratified sand to fine sand to	 0	I I 0	l l 100	l l 100	 70-100	l l 5-75	 45.90	110-50	101
	10-24	I very fine sandy loam	I	1	1 100	1 100	170-100	13-73		 	U-1
	124-72	IVery gravelly sand	10	10	135-90	130-80	110-60	0-20	185-100	0-15	0-5
) _ _ _ _			1	1	1		!	1	!	1	
alchaket	0-3 3-24	Slightly decomposed plant material	I —- I 0	1 0	1 100	100	1—- 190-100	1 —- 165-75	I —-	10-50	15.1
		IVery fine sandy loam IStratified silt loam to fine sand	10	10		195-100			145-80		
		IVery gravelly sand	10	10		130-55	120-30		185-100		
	1	1	1	1	1	1	1	1	1	1	1
40: .emeta		l lPeat					!	!	!		!
emeta	120-72	IPermanently frozen mucky peat	i —	i —-	i —-		i —	i —-	i	i	i —
	Ī		i	i	İ	İ	İ	i	İ	i	İ
1 1:		I I I	1	1	1	1	!	!	!	1	!
iscum		Peat	<u> </u>	<u> </u>	!	!	!	ļ	!	<u> </u>	
	3-11 11-15	IMuck IMucky silt loam	1 0	I —- I 0	—- 100	—- 100	1 —- 195-100	1—- 175-90	110-45	150-80	15 1
	111-15	Stratified silt loam to loamy fine sand	1 0	10		100	180-100	150-80		110-50	
	170-72	IVery gravelly sandy loam	10	10		125-50	125-45	110-35		120-50	
	I	I	İ	1	I	1	I	I	I	1	I
loonku		Moderately decomposed plant material	I —	I —-		—-	—-				
	12-6	Silt loam Stratified sand to fine sand to	10	10	1 100	100	185-100	150-90		150-80	
	6-47 	Stratified sand to fine sand to very fine sandy loam	0 	0 	100 	100 	l 0-100 l	l 0-55 l	145-80 	10-50 	ı ∪-1
	47-72	Gravelly sand, extremely gravelly sand,	I 0	ίο	135-90	 25-75	0-45	i 0-20	185-100	0-15	0-3
		I very gravelly sand	1	1	1	1	i .	1	1	1	1

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	l IDepth	USDA texture	Fragm >10	ents 3-10		entage p /e numb			 Sand 	 Silt	l l Clay
and son name	į	1	linches		4	10	40	200	<u> </u>	İ	
		! 	Pct.	Pct.		<u> </u>	- <u> </u>	<u> </u>	Pct.	Pct.	Pct.
142:		1			 	1			 		
Minto		Slightly decomposed plant material	I —	I —-	I —						
	5-9 9-16	Silt loam Silt		0 0	100 100	100 100	190-100 190-100	185-100		150-80 150-100	0-10
	19-16	Silt loam, silt Silt loam, silt		1 0	1 100	1 100	190-100			150-100	
	i	1	i	İ	İ	i	I	I		I	
43:			Į.	!	!	1	1	!	!	1	1
Minto	1 0-5 1 5-9	Slightly decomposed plant material Silt loam		I —- I 0	 100	1 100	1—- 190-100	1 —- 185-100	110-50	1 150-80	 0-10
	19-16	Silt loam, silt		1 0	1 100	1 100	190-100			150-00	
		ISilt loam, silt		i 0	1 100	1 100	195-100			150-100	
44.	ļ.		I	ļ.	1	1	1	1		1	1
44: Minto	ا ا 0-5	 Slightly decomposed plant material	i—	i	i	i	i	i	 	l 	İ
WIII ILO	15-9	Silt loam		0	1 100	100	190-100	185-100	110-50	150-80	0-10
	19-16	Silt loam, silt		10	1 100	1 100	190-100			150-100	
	116-72	Silt loam, silt	10	1 0	100	100	195-100	185-100	0-50	150-100	0-10
45:		1				1			1		1
Minto	0-5		i—	i	i—	i	i	i —-	i	i	i
	15-9	Silt loam	10	10	100	1 100	190-100	185-100	110-50	150-80	0-10
	9-16	ISilt loam, silt		1 0	100	100	190-100			150-100	
	116-72	Silt loam, silt		0 	100	100	195-100		0-50	50-100	0-10
Chatanika	l 0-4		i	i	i	i	i	l —-	i	i	i —-
Stratariita	14-6	Mucky silt loam	i o	i o	i 100	i 100	190-100	•	10-50	150-80	0-10
	l 6-21	ISilt Ioam	10	I 0	100	100	190-100		110-50		0-10
	21-72	Permanently frozen material	ļ —-	!	! 	!	!	!	ļ	!—-	!
46:		1	1	1		1	1				1
Minto	0-5	 Slightly decomposed plant material	i —	i —	i —	i —	i —-	i —-	i —-	i —-	i —-
	15-9	Silt loam	10	10	100	1 100	190-100	185-100	110-50	150-80	0-10
	19-16	Silt loam, silt		10	100	100	190-100			150-100	
	116-72	Silt loam, silt		0 	100	1 100	195-100	185-100	10-50	150-100	10-10
Chatanika	0-4			i	i	i	i	i	i	i	i
	l 4-6	Mucky silt loam	10	Ι 0	100	100	190-100	180-95	110-50	150-80	0-10
	16-21	Silt loam		10	100	100	190-100	180-95	110-50	150-80	0-10
	121-72 I	Permanently frozen material				l					
147:	i	i	i	i	i	i	i	i	i	i	i
Minto		Slightly decomposed plant material	ļ —	ļ —-	I —	l —-	l —-	I —-	I —-	I —-	l —-
	15-9	ISilt loam			100	1 100	190-100	185-100			0-10
	9-16 16-72	Silt loam, silt Silt loam, silt			100 100	100 100	190-100 195-100	185-100 185-100		150-100	
	1		Ī	l	1	1		1			
Chatanika		Slightly decomposed plant material		•	I —-	I —-	l —-			l —-	I —-
	4-6	Mucky silt loam			100	1 100	190-100				0-10
		Silt loam Permanently frozen material	0 —-	0 <u></u> -	100	100	190-100	180-95 1 —	110-50	150-80 I	0-10 —-
			i	i	i	i	i	i	i	i	i
148:	1		1	1	1	1	1	1		1	1
Minto	0-5	Slightly decomposed plant material	I —-	I —-	1			—- 85-100	110.50	—-	
	l 5-9 l 9-16	Silt loam Silt loam, silt		0 0	100 100	100 100	90-100 90-100	185-100			0-10
	116-72	Silt loam, silt			1 100	1 100	195-100	185-100			
	1	I	1	I	I	1	1	1		1	1
Chatanika		Slightly decomposed plant material	I 	I 	I —-				110.50	I —-	I —-
	4-6 6-21	lMucky silt loam ISilt loam		0 0	100 100	100 100	190-100 190-100		110-50 110-50		0-10 0-10
		IPermanently frozen material	i —-	i —-	I —-		—-	—-		I —-	
	1	1	İ	I	I	1	İ	İ	I	I	I
	1	1	1	1	1	1	1	1	1	1	
		ID .	- :	;		i	i	i			1
49: Mosquito			i —-	i —-	—- 100	—- 100	—- 00-100	—- 70-05	—- 45.90	—- 10-50	
		Peat Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	 0	i —- I 0	—- 100	—- 100	—- 90-100	—- 70-95	—- 45-80	—- 10-50	—- 0-10

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	l IDepth	USDA texture	Fragme >10	ents 		entage p ve numb			 Sand	 Silt	l Clay
and son name	 	 	linches	linches	 4 	10 	40	1200	.' 	 	
50:	l In.	 	Pct.	Pct.		İ	İ	İ	Pct.	Pct.	Pct.
Mosquito	l 0-18	lPeat	i	i	i—	i	i—	i	i—	i —-	i
	18-24	ISilt loam, very fine sandy loam,	10	10	100	100	190-100	170-95	145-80	110-50	0-1
	l 124-72	I stratified silt loam to loamy fine sand IPermanently frozen material	l —-	i —-	l	<u> </u>	i	l	i —	 	 —
	l	1	i	i	i	i	i	i	i	i	i
	0-2	Moderately decomposed plant material	 0	•				—-			
		ISilt loam IStratified sand to fine sand to	10		100 100	100 100	85-100 0-100	150-90 1 0-55		150-80 110-50	
		I very fine sandy loam	Ī	Ī	1	1	1	1	1		Ι .
	47-72 	IGravelly sand, extremely gravelly sand, I very gravelly sand	0 	0 	135-90 I	25-75 	0-45 	0-20 	85-100 	0-15 	0-3
51:] 	 	I	 	1	I I	1	 		
Noonku	l 0-2	Moderately decomposed plant material	i —-	i —-	i —-	i —-	i —-	i	i —	i —	i —-
	2-6	ISilt loam	10		1 100	1 100	185-100			150-80	
	l 6-47 I	Stratified sand to fine sand to very fine sandy loam	1 0 1	0 	100 	100 	0-100 	l 0-55	145-80 I	110-50	U-1
	47-72 	Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	135-90	 25-75	0-45	0-20	85-100	0-15	0-3
50.	i	l	į	į	į	į	į	į	į	į	į
52: North Pole	ا ا 0-2	ISlightly decomposed plant material	i	i	i —-	i —	i	i	i	i	
		lHighly decomposed plant material	l —-	I —-	I —-	I —-	I —-	I —-	I —-	l —-	I —-
			10		100	100	180-100	140-80		110-50	
	39-72 	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	0 	0 	55-85 	25-75 	0-45 	10-20	85-100 	10-15	
53:	 	I I	 		İ						
North Pole		Slightly decomposed plant material	ļ —-	ļ —-	ļ —-	ļ —-	ļ —-	ļ —-	!	ļ —-	
		lHighly decomposed plant material IStratified fine sand to silt loam	I —- I 0		 100	 100	—- 80-100	1—- 140-80	1 —- 145-80	10-50	10-1
			1 0		155-85	125-75	0-45		185-100		
Mosquito	 0.10	 Peat	i i—	i i —-	į	į	į	į	į	į	į
•		Silt loam, very fine sandy loam,	1 0	'	1 100	1 100	190-100	170-95	 45-80	110-50	0-1
		stratified silt loam to loamy fine sand	İ	i	İ	İ	I	i	İ		İ
	24-72 	Permanently frozen material		ļ —-			<u> </u>		ļ	ļ —-	
iscum	l 0-3	lPeat	i —-	i	i—	i —-	i—	i	i	i —-	i —-
		lMuck	l —-		l —-	l —-	l —-	I —-	l —-	l —-	I —-
		Mucky silt loam	0 0		100 100	100 100	195-100 180-100	175-90		150-80	
		,	1 0		155-70	150-65	30-50	150-80		10-50	
54:	 			!				į		į	
North Pole		Slightly decomposed plant material Highly decomposed plant material		I —-		—-	—-	—-	—- —-	<u> </u>	
		Stratified fine sand to silt loam	0	0	1 100	100	180-100	140-80	145-80	110-50	0-1
			0 	0 	155-85 I	25-75 	0-45 	0-20 	85-100 	0-15 	0-3
loonku	l l 0-2	 Moderately decomposed plant material	 	 	l I —-	I	l 	l 	I I —-	 	
	l 2-6	ISilt loam	I 0		i 100	i 100	185-100	150-90		50-80	
	6-47	Stratified sand to fine sand to	1 0	0	100	100	0-100	0-55	45-80	110-50	0-1
	ı 47-72 	l very fine sandy loam Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	135-90	125-75	0-45	0-20	 85-100	0-15	0-3
	!		İ					į	į	į	į
55: Peede	ا ال ^د ی ا	 Moderately decomposed plant material	l 	1 1	 	 	1 1 —	 	 	l l	
		Silt loam	0	0	100	100	85-100	70-90	10-47	50-80	3-1
56:	l I] 	I I	I	 	1	I I	1	 	 	
eede	l 0-2	 Moderately decomposed plant material	i	i	i —	i	i —-	i —	i —	i —	i —
		Silt loam	i 0 I	i 0	100 	i 100	85-100 	170-90 I	10-47 	150-80 I	3-1
Mosquito		lPeat	i —-	i —-	<u>i —</u>	<u>i —</u>	<u> </u>	<u>i</u> —-	<u> </u>	i —	<u> </u> —
	18-24	Silt loam, very fine sandy loam,	10	10	100	100	190-100	170-95	145-80	110-50	0-1
	 24-72	I stratified silt loam to loamy fine sand IPermanently frozen material	l	İ	l	İ	İ	l 	İ	I	<u> </u>
	, <u>-</u> / <u>-</u> -		i	i	i	i	i	i	1	i -	i

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	l IDepth	USDA texture	Fragme			entage pa ve numb			 Sand	l Silt	l l Clay
and soil name		 	l >10 l inches	l 3-10 linches		10	40	1 200	 		
	 In.	- ' 	Pct.	Pct.		 		 	Pct.	Pct.	Pct.
57:	i	i	i	i	i	i	i	i	i	i	i
Piledriver		Slightly decomposed plant material	ļ —-	ļ —-	I —-	l —-	l —-	I	l —-	I	!
	3-15	Stratified fine sand to silt loam,	0	10	100	100	70-100	140-95	45-80	110-50	5-10
	 15-33	I very fine sandy loam IStratified sand to fine sand to	1 0	1 0	1 100	l l 100	 40-100	l 5-55	1 145-80	110-50	ו 0-10
		I very fine sandy loam	i	i	1			1		1	10.0
	133-72	Sand, very gravelly sand	1 0	10	155-90	125-85	110-60	0-20	85-100	0-15	0-5
FO:				!	!		1	!	!	!	!
58: Piledriver	0-3	 Slightly decomposed plant material	i	i	i	i —-	i	i	i	i	i —-
ilouit voi	3-15	Stratified fine sand to silt loam,	i 0	I 0	i 100	100	70-100	140-95	45-80	10-50	5-10
	1	I very fine sandy loam	1	1	1	1	1	1	I	1	1
	115-33	Stratified sand to fine sand to	1 0	10	100	100	40-100	5-55	45-80	110-50	0-10
	 33-72	I very fine sandy loam ISand, very gravelly sand	1 0	1 0	1 155-90	l 125-85	l 110-60	0-20	l85-100	 ∩-15	 0-5
			1	i				10-20		l 0-13	
Eielson		Slightly decomposed plant material	i —	i —-	i —-	i —-	i —-	I	I —-	I —-	I —-
	12-49	Very fine sandy loam	1 0	1 0		100	190-100	165-75		113-45	
	49-71	Stratified silt loam to fine sand Extremely gravelly sand,	0 0	0 15-30		195-100 130-80	185-95	140-65	145-80 186-100	110-50	
		gravelly sand, very gravelly sand	1					13-10		10-14	U-5
	i	1	İ	Ì	İ	İ	İ	İ	Ì	Ì	Ì
59:			!	!	!	!	!	!	!	!	!
Piledriver	0-3 3-15	Slightly decomposed plant material Stratified fine sand to silt loam,	—- 0	I —-	 100	—- 100	—- 70-100	—- 40-95	—-	—- 10-50	—-
	3-15	very fine sandy loam	1 0	1 0	1 100	1 100	170-100	140-95	145-60	110-50	1 5-10 1
	115-33	Stratified sand to fine sand to	i o	i o	i 100	i 100	40-100	I 5-55	45-80	i10-50	0-10
		l very fine sandy loam	1	!	<u> </u>	I	1	!	<u> </u>	I	ļ
	133-72	Sand, very gravelly sand	0	0	155-90	125-85	110-60	10-20	185-100	0-15	0-5
Fubar	0-2	 Slightly decomposed plant material	i	i	i	i —-	i	i	i	i	i —-
	2-10	Stratified fine sand to silt loam,	i o	i o	195-100	190-100	150-100	125-80	45-75	120-50	5-10
	1	l very fine sandy loam	1	1	1	1	1	1	1	1	
	10-72 	Sand, extremely gravelly sand, I fine sand, very gravelly coarse sand	0 	0 	48-90 	15-85 	15-35 	0-10 	85-100 	0-15 	0-5
60:	ļ.		1	1	I		1		1		
Pits, gravel			i	i	i —-	i —-	i	i —-	i —	i —	i
. no, gravo.	i	i	i	i	i	i	i	i	i	i	i
61:	1	!	1	1	1	1	1	1	1	1	
Quarry pits		<u> </u>	ļ —-	ļ	ļ —-	ļ —-	!	ļ —-	ļ	ļ	
62:			1		<u> </u>	 	1	1		<u> </u>	i
Riverwash	i —-	i —	i —-	i —	i—	i —-	i —	i —-	i —-	i —	i
	1	!	1	1	1	1	1	1	1	1	
63:	100				1		1	1		1	
Salchaket		Slightly decomposed plant material IVery fine sandy loam	1 0	1 0	1 100	100	190-100	165-75	 45-80	110-50	—- 5-10
		Stratified silt loam to fine sand	10	10		195-100			145-80		
	145-72	Very gravelly sand	1 0	10	140-70	130-55	120-30	5-10	185-100	0-15	0-5
64:				!				!	!		
64: Salchaket	l 0-3	 Slightly decomposed plant material	i	i	i	i —-	i —-	i	i —-	i	i —-
Saionanot	3-24	Very fine sandy loam	i o	I 0		100	90-100	165-75		10-50	5-10
	124-45	Stratified silt loam to fine sand	10	10		195-100			145-80		
	45-72	Very gravelly sand	0	0	40-70	130-55	20-30	5-10	85-100	0-15	0-5
Typic Cryorthents	I 0-30	Stratified gravelly loamy sand to	1 0	l l 0	l 165-80	l 150-75	1 130-65	1 110-55	I 47-77	1 116-50	 3₋7
Typic Cryottilents		gravelly fine sandy loam to	1	1				110-33			3-7
	İ	gravelly silt loam	İ	I	1	I	I	İ	I	1	I
		IStratified fine sand to silt loam	10	10		195-100			145-75		
	163-72	Very gravelly sand, extremely	0	0	140-65	120-50	110-35	0-10	185-100	0-15	0-3
	i I	l gravelly sand		l	I	I I	i I	1	i I	1	
65:	i	i	i	i	i	i	i	i	i	i	i
Saulich	0-16	Mucky peat, peat	I —	I —-	I —-	l —-	l —-	I —-	l —-	I —	l —-
	116-21	ISilt loam, mucky silt loam IPermanently frozen material	0 —-	0 		100 —-	90-100 	165-75	15-50 —-	50-80 	
					l —						I —-

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	l IDepth	USDA texture	Fragm >10	ents 3-10		entage p /e numbe			l I Sand	l I Silt	l Clay
and soil name			inches		4	10	40	200		!	<u> </u>
	 In.	<u> </u> 	Pct.	I I Pct.	 	·	- <u> </u>		I I Pct.	Pct.	Pct.
66:	I	1	1	 	1	1		 	 		
Saulich	0-16	Mucky peat, peat	i —	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	116-21	Silt loam, mucky silt loam	10	Ι 0	1 100	1 100	190-100	165-75	115-50	150-80	10-5
	21-72	Permanently frozen material					ļ	ļ —-		!	
67:	i	i	i		i	i	i	i		i	i
Saulich		Mucky peat, peat	<u> —</u>	l —-	I —-	I —-			l —-		I —
	116-21	Silt loam, mucky silt loam	10	10	100	1 100	190-100	165-75	115-50	150-80	0-5
		Permanently frozen material		i —-		i —			i —	i -	i —
68:			1	!	!	!	1	ļ.	I	1	ļ
Saulich	116-21	lMucky peat, peat ISilt loam, mucky silt loam	I —- I 0	 -		1 100	1—- 190-100	—- GE 7E	—- 15-50	—- 50-80	—- 0-5
		Permanently frozen material	I —-	U	100 	I —-	190-100	 -	 -		U-5
	I	I	İ	i	İ	i	i	İ	İ	i	İ
Minto		Slightly decomposed plant material	I —-	I —-							
	5-9 9-16	ISilt loam ISilt loam, silt	0 0	0 0	100 100	100 100		l85-100 l85-100		150-80 150-100	0-1
	116-72	ISilt loam, silt	1 0	10	1 100	1 100		185-100		150-100	
	!	!	Į.	ļ.	Į.	ļ.	!	!	!	!	!
69: Saulich	 0-16	 Mucky peat, peat	i	! 	İ	İ	i	i —-	l —-	i —-	!
, admorr	116-21	Silt loam, mucky silt loam	I 0	I 0	i i 100	i i 100	190-100	165-75	15-50	150-80	0-5
	21-72	IPermanently frozen material	!	!	!	!	!	!	!	!	!
/linto	0-5	 Slightly decomposed plant material	İ	l 1	İ	İ	İ	l 	l I	I	l I
VIII ILO	15-9	Silt loam	10	1 0	1 100	1 100	190-100	185-100	110-50	150-80	0-1
	19-16	Silt loam, silt	10	10	1 100	l 100		185-100		150-100	0-1
	16-72	Silt loam, silt	1 0	10	100	1 100	195-100	185-100	0-50	150-100	0-1
70:	- 1	1	1		1		1		 	1	i i
Steese	0-2	Slightly decomposed plant material	i —-	i —-	i —-	i —	i —	i —-	i —-	i —-	i —-
	12-5	Silt loam		10	1 100	1 100	190-100		115-50		10-5
	15-27	ISilt, silt loam IVery channery silt loam, channery	0 0	l 0 l 0-40	100 40-65	100 15-55	190-100 115-55		l 0-50 l15-50	150-100 150-80	10-5 10-5
		silt loam, extremely channery silt loam	1	0-40 		113-33		110-50	113-30		U-3
	133-72	lWeathered bedrock	ļ —-	ļ —-	ļ —-	i —-	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> —-
71:	-		1	1	1	1			 		
7 1. Steese	0-2		i	i —	i —	i —	i—	i —-	i —-	i —-	i —-
	12-5	ISilt loam	10	Ι 0	1 100	1 100	190-100		115-50		l 0-5
	5-27	Silt, silt loam	10	10	100 40-65	1 100	190-100		0-50	50-100 50-80	
	27-33 	IVery channery silt loam, channery silt loam, extremely channery silt loam	0 	l 0-40 l	140-65 I	15-55 	15-55 	10-50 	15-50 	150-80 I	0-5
	133-72	Weathered bedrock	i —-	i —-	i —-	i —-	i —-	i —-	i —	i —-	i —-
70.	1		1	I	1	1	1	1		1	
72: Steese	0-2	ISlightly decomposed plant material	i	i —	i	i —	i	i —-	i —-	i —-	i
	12-5	Silt loam	i o	i o	i 100	i 100	190-100		15-50		0-5
	15-27	Silt, silt loam	10	1 0	1 100	1 100	190-100		0-50	150-100	
	127-33	IVery channery silt loam, channery silt I loam, extremely channery silt loam	1 0	l 0-40	140-65 I	115-55 I	15-55 	110-50	115-50	150-80	0-5
	133-72	IWeathered bedrock	i	i —-	i —-	i —-	i —-	i —	i—	i	i —-
70	Ţ	!	!	I	1	ļ.	!	!	ļ.	!	ļ
73: Steese	0-2	 Slightly decomposed plant material	<u> </u>	l I	<u> </u>	 	I	l 	I I —	I	I I
71003G	12-5	Silt loam	1 0	1 0	1 100	1 100	190-100	180-90	15-50	150-80	0-5
	15-27	ISilt, silt loam	10	Ι 0	100	l 100	190-100	180-90	l 0-50	150-100	
	127-33		1 0	0-40	140-65	115-55	115-55	110-50	15-50	150-80	0-5
	 33-72	I loam, extremely channery silt loam IWeathered bedrock	İ	l 	İ —-	İ	i	İ	l —-	i —	i
			i	i	i	i	i	i	i	i	i
74:			1		1		I	Į.	I	1	
Steese	0-2 2-5	ISlightly decomposed plant material ISilt loam	 0	l —- I 0	—- 100	 100	—- 90-100	1 180-90	—- 15-50	—- 50-80	—- 0-5
	2-5 5-27	Silt, silt loam	1 0	1 0 1 0	1 100	1 100	190-100		10-50	150-80	
		IVery channery silt loam, channery silt	1 0		140-65	115-55			115-50		0-5
	1	I loam, extremely channery silt loam	1	I	1	Į.	1	Į.	l	1	
	133-72	Weathered bedrock	1	I	1	1	1	1	I	1	l —

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	I IDepth	USDA texture	Fragme >10	ents 3-10		entage p ve numb			 Sand 	l Silt 	l Clay
and son name	į		linches		4	10	40	200	 	<u>.</u>	İ
		.' 	Pct.	Pct.	<u>'</u>	'	- ' 	<u>'</u>	Pct.	Pct.	Pct.
75:		i	1	i							
Steese		Slightly decomposed plant material	l —-	l —-		l —-					I —-
	12-5	Silt loam	1 0	10	100	1 100	190-100		115-50		10-5
	l 5-27 l27-33	ISilt, silt loam IVery channery silt loam, channery silt	0 0	0 0-40	100 40-65	100 15-55	190-100 115-55		10-50	150-100 150-80	10-5
		loam, extremely channery silt loam	1	10-40		113-33	113-33	110-30	 		10-3
	133-72	lWeathered bedrock	i —-	i —	i —-	i —-	i —-	i —-	i —-	i —	i —-
76:	l I		1	l	1		1		1		
Steese	i 0-2	Slightly decomposed plant material	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	12-5	ISilt loam	1 0	10	100	100	190-100		115-50		0-5
	5-27	Silt, silt loam	10	10	100	100	190-100			150-100	
	127-33	IVery channery silt loam, channery silt loam, extremely channery silt loam	1 0	0-40	140-65	115-55	115-55	110-50	115-50	150-80	0-5
	133-72		i	i—	i —	i	i	i	i	i	i
0.11			1	Į.	Į.	1	!	1	!	ļ.	ļ .
Gilmore	1 0-3 3-6	Slightly decomposed plant material Silt loam		I —- I 0	—- 100	—- 100	—- 90-100	180-90	—- 15-50	1 —- 150-80	—- 0-5
	16-12	ISilt loam, silt	1 0	10	1 100	1 100	185-95			150-60	
		IVery channery silt loam,	10		135-65	115-55	115-55		115-50		0-5
	1	l extremely channery silt loam	I	1	1	1	1	1	!		ļ .
	119-72 		i —-		<u> </u>						
177:			!	1	Į.	1	1	1	!	!	ļ
Steese	0-2 2-5	Slightly decomposed plant material Silt loam	1 0	1 0	1 100	1 100	1—- 190-100	190.00	1 —- 115-50	I —-	l —-
	15-27	Silt loam	10	10	1 100	1 100	190-100			150-00	
	127-33	Very channery silt loam, channery silt	10	0-40		115-55	115-55		115-50		10-5
	1	I loam, extremely channery silt loam	1	I	1	I	I	1	1	I	1
	33-72 	lWeathered bedrock	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>			
Gilmore	i 0-3	Slightly decomposed plant material	i	i	i	i —	i —	i	i —-	i	i —-
	13-6	Silt loam	10	10	1 100	1 100	190-100		115-50		10-5
	16-12	Silt loam, silt	0 0	l 0 l30-50	l 100 l35-65	100 15-55	185-95 115-55			150-100	10-5 10-5
	112-19	Very channery silt loam, I extremely channery silt loam	1 0	130-30	133-65	115-55	110-00	110-50	115-50	150-60	l 0-5
	19-72	lWeathered bedrock	i	<u>i</u> —	i —-	<u>i</u> —	j —-	<u>i</u> —	<u>i</u> —-	j	j
178:	l I	}	1	l	 	1	1	1	 	 	1
Steese	·i 0-2	Slightly decomposed plant material	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	12-5	ISilt loam	1 0	10	100	100	190-100		115-50		0-5
	15-27	Silt, silt loam	1 0	1 0	100	100	190-100			150-100	
	127-33 I	IVery channery silt loam, channery silt loam, extremely channery silt loam	0 	0-40 	40-65 	15-55 	15-55 	110-50	115-50	150-80	0-5
	133-72	Weathered bedrock	i —-	i —	i —-	i	i —-	i —-	i —-	i —	i —-
Gilmore	102	 Slightly decomposed plant material	ļ	l I —-	 	l 	ļ 	<u> </u>	 		
Jilmore	13-6	Signify decomposed plant material	1 0	10	1 100	1 100	190-100		115-50	150-80	10-5
		Silt loam, silt	10	10	1 100	1 100	185-95			150-100	
		IVery channery silt loam,	10	130-50		115-55	115-55		115-50		l 0-5
		l extremely channery silt loam	1	1	1	ļ	1	1		ļ	
	119-72 		<u> </u>		<u> </u>		1 		—- 	i —	
179:	i	i	i	i	i	i	i	i	i	i	i
Steese	0-2	Slightly decomposed plant material	I —-	I —-					I	I —-	I —
	l 2-5 l 5-27	ISilt loam ISilt, silt loam	0 0	0 0	100 100	100 100	190-100 190-100		115-50	150-80 150-100	10-5
		Very channery silt loam, channery silt	10	1 0-40	140-65	115-55	190-100		115-50		10-5
	1	I loam, extremely channery silt loam	i	1			1				i
	133-72	Weathered bedrock	ļ					<u> </u>			
Gilmore	0-3	ISlightly decomposed	i	i —	i	i	i	i —-	i —-	i —-	i —-
		I plant material	1	1							105
	3-6 6-12	ISilt Ioam ISilt Ioam, silt	0 0	0 0	100 100	100 100	190-100 185-95		115-50	150-80 150-100	10-5
		Very channery silt loam,	1 0			115-55	115-55		115-50		10-5
	1	l extremely channery silt loam	i					1			1
	110.70	lWeathered bedrock	1	1	1	1	1	1		1	1

Table 6. Engineering Sieve Data—Continued

Map symbol	l l Depth	USDA texture	Fragme			entage pa ve numbe			 Sand	 Silt	l Clay
and soil name		 	>10 inches	l 3-10 linches		10	40	200	. I . I	 	
		! [l Pct.	l Pct.		- 	<u> </u>	<u> </u>	Pct.	Pct.	Pct.
	İ	İ	Ī	1	Ì	İ	İ	İ	İ	ĺ	I
180:		ID.	!	!	!	!	!	!	!	!	!
Tanacross		Peat			 100	—- 100	 95-100	—- 75.00	 10-50	1 —- 150-80	1
		IMucky silt loam IStratified fine sandy loam to silt loam	1 0	10	1 100	1 100	185-100			110-50	
		Permanently frozen material	i —-	i —-	i —-	i —-		I —-	I —	I —-	i —
	I	I	1	I	I	1	1	I	I	I	I
181: T			!	!		1	1	!	!	!	!
Tanana	10-3 13-6	Slightly decomposed plant material Silt loam, mucky silt loam	1 0	1 0	1 100	1 100	1 —- 195-100	—- 75.00	—- 10-45	150-80	15.1
		Very fine sandy loam, stratified	1 0	1 0	1 100	1 100	185-100		145-80	110-50	
	1	silt loam to loamy fine sand	i	i		1				1	Ī
	125-72	IPermanently frozen material	I —-	I	I —-	I —-	I —	I —	I —	I —-	I —
	!	!	!	!	!	!	!	!	!	!	!
182: Tanana	100		I	1	I	I	I	I	I	1	1
Tanana	0-3 3-6	Slightly decomposed plant material Silt loam, mucky silt loam			 100	—- 100	 95-100	175-90	—- 10-45	1 —- 150-80	—-
		Very fine sandy loam, stratified	10	10	1 100	1 100	185-100		145-80	110-50	
	1	I silt loam to loamy fine sand	i	i		1		1	1	1	
	125-72	IPermanently frozen material	I —-	I —-	I —-	I —-	I —	I —	I —	I —-	I —
			!	!	1	1	!	!	!	!	!
Mosquito		Peat	I —-	I —-		—-		—-	—-	110.50	
	118-24	ISilt loam, very fine sandy loam, I stratified silt loam to loamy fine sand	10	1 0	100	1 100	190-100	170-95	145-80 I	110-50	10-11
	124-72	Permanently frozen material	i	i —-	i —-	i	i—	i —	i—	i	i—
	1	I	1	1	1	1	1	I	1	1	1
183:	!		!	!	!	!	!	!	!	!	!
Typic Cryaquents			I —-	I —-							
	l 6-72	ISilt loam	1 0	1 0	100	1 100	185-100	1/5-95	110-45	150-80	15-10
Histic Cryaquepts	0-13	Mucky peat, muck	i —-	i —-	i —-	i —-	i —	i	i —	i —-	i —-
		IVery fine sandy loam, silt loam	i o	i o	100	i 100	150-100	130-100	110-80	110-80	0-10
	130-72	IVery fine sandy loam, silt loam	10	10	100	100	150-100	125-100	110-80	110-80	0-10
T	10.00	ID+	1	!		1	1	!	!	!	
Terric Cryofibrists	1 0-28 128-40	lPeat	<u> </u>			—-	<u> — </u>	<u> </u>	<u> — </u>	<u> </u>	
		Silt loam, very fine sandy loam,	1 0	10	1 100	1 100	195-100	180-100	—- 0-75	120-90	15-39
	1	I silty clay loam	i	i		1			1	1	
	I	I .	1	1	I	1	I	I	I	1	I
184:			1	1	I	I	1	1	1		1
Typic Cryorthents		Slightly decomposed plant material	I —-	I —- I 0	—- 100	—- 95-100	—- 85-05	—- 40-65	l —- l45-75	—- 20-50	115
		Stratified fine sand to silt loam Very gravelly sand, extremely	0 0	10	140-65			0-10	145-75		
		gravelly sand		i	1		1	1			1
	1	1	1	1	1	1	1	I	I	1	I
185:											
ı ypıc Cryortnents, Fill	0-30	Stratified gravelly loamy sand	10	10	165-80	150-75	130-65	110-55	147-77 1	116-50	13-7 1
	i i	I to gravelly fine sandy loam to I gravelly silt loam	I	1		I	I	1	1	1	i i
	130-63	Stratified fine sand to silt loam	10	0	1 100	195-100	175-95	150-75	 45-75	20-50	1-5
		Very gravelly sand, extremely	10	1 0	140-65	120-50			185-100		
	ļ.	gravelly sand	1	1	1	1	1	1	1	1	1
Indonesia Instituti	ļ		1	1	I	1	1	1	1		!
Urban land		I —	I —-	1	<u> </u>	I —-	<u> </u>	I —-	<u> </u>	<u> </u>	1
186:		1	1	1		I	I	1	1	1	
Urban land		<u> </u>	i —-	i —	i —	i —	i —	i —	i —	i —	i
	i	İ	İ	í	İ	İ	İ	İ	İ	İ	İ
187:	1	I	1	1	I	1	1	I	I	1	I
Water	!	<u> </u>	!	!	!	!	!	!	!	!	1
	1	1	1	1	1	1	1	1	1	1	1

Table 7. Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors—T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol	l I Depth	l I Moist	Permeability	l l Available	l l Linear	l l Organic	Erosic	n factor	S	। _l Wind	l I Wind
and soil name	 0-12	l bulk l0.05-0.10	l 6-20	water 10.05-0.35	lextensi-	l matter l 85-95	 	 	1	l erodibility	
	12-16 16-72	0.07-0.18	0.6-2 0.000-0.001	0.35-0.50 		75-90 					
102:							1				
Bradway	0-7 7-10 10-26 26-72	0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	0.05-0.35 0.23-0.25 0.15-0.18 		85-95 8.0-12 0.0-3.0 	 .37 .32 	 .37 .32 	2 	8 	0
103: Chatanika	i I 0-4	 0.05.0.10	. 6.30	 0.05.035	į	 05.05	i 	i i	i I 4	i I 2	 134
Chatanika	0-4 4-6 6-21 21-72	0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	0.05-0.35 0.21-0.23 0.21-0.23 		85-95 7.0-12 1.0-5.0 	.37 .43 	.37 .43 	4 	2	134
104:	į	İ	1			!					
Chatanika	0-4 4-6 6-21 21-72	0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	0.05-0.35 0.21-0.23 0.21-0.23 		85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	4 	2 	134
105:					į		1				
Chatanika	0-4 4-6 6-21 21-72	0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	0.05-0.35 0.21-0.23 0.21-0.23		85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	4 	2 	134
106:					į		į	į		 2	
Chatanika	0-4 4-6 6-21 21-72	0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	0.05-0.35 0.21-0.23 0.21-0.23 		85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	4 	2	134
107:		ļ	1			-				!	
Chatanika	0-4 4-6 6-21 21-72	0.05-0.10 1.00-1.30 1.00-1.30 		0.05-0.35 0.21-0.23 0.21-0.23 		85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	4 	2 	134
Goldstream	0-9	0.05-0.10		0.05-0.35		 85-95			1 2	8	0
	9-12 12-20 20-72	1.00-1.20 1.00-1.20 	0.6-2 0.6-2 0.000-0.001	0.20-0.22 0.20-0.22 		4.0-8.0 2.0-5.0 	.37 .55 	.37 .55 	 		
108: Chana		10.05.0.10	6.20	10.05.0.35	į	 	į	į	i 1	 2	 124
Chena	0-4 4-9 9-72	10.05-0.10 11.10-1.20 11.40-1.50	0.6-6	10.05-0.35 10.16-0.18 10.03-0.05		85-95 3.0-6.0 0.0-1.0	 .28 .10	 .32 .55		2	134
109: Dumps, landfill	i 	i 	i 		 	 	 	i 	 - 	i i	
110: Dumps, mine			 				 	 	 -		
111:		 	 	 	 	 			 	 	
Eielson	0-2 2-49 49-71	10.05-0.10 11.10-1.20 11.10-1.20	l 0.6-2 l 0.6-2	10.05-0.35 10.20-0.22 10.20-0.22	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43	 .37 .43	5 	<u>2</u> 	134
	71-72 	1.50-1.60 	l 6-20	10.02-0.04 1	0.0-2.9 	0.0-1.0 	.05 	l .28 l	1	1	I I

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	l Permeability	l l Available		l l Organic	l_rosid	on factor	S 	। _l Wind	l I Wind
and soil name		l bulk l density	 	water capacity	lextensi- l bility l	l matter l	 Kw 	 Kf 	l IT I	l erodibility l group	l erodibility l index l
	l In.	l g/cc	I In/Hr	In/In	Pct.	Pct.		İ			
112: Eielson	 0-2 2-49 49-71 71-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	10.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
Piledriver	0-3 3-15 15-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	l 0.6-2 l 0.6-2	1 10.05-0.35 10.19-0.22 10.15-0.18 10.03-0.06	0.0-2.9 0.0-2.9	85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134
113: Eielson	 0-2 2-49 49-71 71-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9 0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
Tanana	0-3 3-6 6-25 25-72	 0.05-0.10 1.10-1.20 1.10-1.20 	6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.20-0.23 0.20-0.23 	10.0-2.9	85-95 2.0-6.0 0.0-2.0 	 .37 .43 	 .37 .43 	 2 	 8 	 0
114: Ester	 0-9 9-12 12-21 21-72		6-20 0.000-0.001 0.000-0.001 0.000-0.001	 0.05-0.35 	 	 85-95 7.0-12 1.0-5.0 	 	 	 1 1 	 8 	 0
115: Ester	 0-9 9-12 12-21 21-72		6-20 0.000-0.001 0.000-0.001 0.000-0.001	 0.05-0.35 	 	 85-95 7.0-12 1.0-5.0 	 	 	 1 	 8 	 0
116: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	2	 134
117: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22	0.0-2.9	 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	2	 134
118: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20		 0.05-0.35 0.20-0.22 0.20-0.22			 .37 .43	 .37 .43	 5 	2	 134
119: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22	10.0-2.9	 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	2	 134
120: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22	10.0-2.9	 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	2	 134
121: Fairbanks, strongly sloping	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22	10.0-2.9	 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	2	 134
Fairbanks, steep	0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	10.05-0.35 10.20-0.22 10.20-0.22	10.0-2.9	85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l Moist	 Permeability	 Available	 Linear	l l Organic	Erosio	on factor	'S	 Wind	l Wind
and soil name	 	l bulk l density	 	water capacity		matter	 Kw	 Kf 	 T _	erodibility	
	l In.	l g/cc	l In/Hr	In/In	Pct.	Pct.	1	1	1	1	
122: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
Steese	0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 		 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10	0.0-2.9 0.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
123: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
Steese	0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 		0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10	0.0-2.9 0.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	2 	2 	134
124: Fubar	 0-2 2-10 10-72	 0.05-0.10 1.20-1.30 1.50-1.60	 6-20 0.6-2 6-20	 0.05-0.35 0.20-0.22 0.03-0.05		 85-95 2.0-4.0 0.0-1.0	 .32 .05	 .32 .28	 1 	 2 	 134
Piledriver	0-3 3-15 15-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	6-20 0.6-2 0.6-2 6-20	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9	85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	2 	 2 	 134
125: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50		 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .10	 .37 .43 .43	 1 	 2 	 134
126: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 		 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .10		 1 	2 1 1 1 1 1 1 1 1 1	 134
127: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	I 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .10 	 .37 .43 .43	 1 	 2 	 134
128: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10	 .37 .43 .43 	 1 	 2 	 134
129: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	Permeability	l l Available	l Linear	l l Organic	Erosid	on facto	rs 	। _l Wind	l l Wind
and soil name		l bulk l density l	 	water capacity 	lextensi- l bility l		 Kw 	 Kf 	l IT I	l erodibility l group l	l erodibility l index l
130: Gilmore	In. 0-3 3-6 6-12 12-19 19-72	g/cc 0.05-0.10 1.10-1.20 1.10-1.50 	l 0.6-2 l 0.6-2	In/In 10.05-0.35 10.20-0.22 10.20-0.22 10.05-0.10	0.0-2.9 0.0-2.9	Pct. 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .10	 .37 .43 .43	 1 		
131: Gilmore	0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10	 0.0-2.9 0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0	.37 .43 .15	 .37 .43 .55	 1 	 2 	 134
Ester	0-9 9-12 12-21 21-72	 0.05-0.10 1.10-1.20 1.40-1.50	I	 0.05-0.35 	 	 85-95 7.0-12 1.0-5.0 	 	 	 1 1 	 8 	 0
132: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	 6-20 0.6-2 0.6-2 2-6 2-6	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9		 .37 .43 .10	 .37 .43 .43	 1 	 2 	 134
Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	 6-20 0.6-2 0.6-2 2-6 	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	10.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55	 2 	 2 	 134
133: Goldstream	 0-9 9-12 12-20 20-72	 0.05-0.10 1.00-1.20 1.00-1.20 	 6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.20-0.22 0.20-0.22 		 85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	 2 	 8 	 0
134: Goldstream	 0-9 9-12 12-20 20-72	 0.05-0.10 1.00-1.20 1.00-1.20 	 6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.20-0.22 0.20-0.22 		 85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	 2 	 8 	 0
135: Goldstream	 0-9 9-12 12-20 20-72	 0.05-0.10 1.00-1.20 1.00-1.20 	6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.20-0.22 0.20-0.22 		 85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	 2 	 8 	 0
Histels	0-12 12-17 17-26 26-72			 0.05-0.35 0.35-0.50 		85-95 75-90 	 	 	 1 	 8 	 0
136: Histels	 0-12 12-17 17-26 26-72			 0.05-0.35 0.35-0.50 		 85-95 75-90 	 	 	 1 	 8 	 0
137: Jarvis	 0-3 3-6 6-24 24-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	l 0.6-2 l 0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l Moist	 Permeability	l l Available	l Linear	l l Organic	Erosid	on factor	rs	l l Wind	l Wind
and soil name	 	l bulk l density	 	water capacity	lextensi- l bility l	matter 	 Kw _	 Kf 	 T 	l erodibility l group l	l erodibility l index l
	l In.	l g/cc	l In/Hr	In/In	Pct.	Pct.	1		I	1	
138: Jarvis	 0-3 3-6 6-24 24-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	l 0.6-2 l 0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134
Chena	0-4 4-9 9-72	 0.05-0.10 1.10-1.20 1.40-1.50	0.6-6	10.05-0.35 10.16-0.18 10.03-0.05	10.0-2.9	85-95 3.0-6.0 0.0-1.0	 .28 .10	 .32 .55	 1 	2 	 134
139:			I I		i	1					i i
Jarvis	0-3 3-6 6-24 24-72	0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	l 0.6-2 l 0.6-2	10.05-0.35 10.19-0.22 10.15-0.18 10.03-0.06	0.0-2.9 0.0-2.9	85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	2 	2 	134
Salchaket	0-3 3-24 24-45 45-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9 0.0-2.9	85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
140: Lemeta	 0-20 20-72	 0.05-0.10 	 6-20 0.000-0.001	 0.05-0.35 	 	 85-95 	 	 	 1 	 8 	 0
141: Liscum	 0-3 3-11 11-15 15-70 70-72	 0.05-0.10 0.20-0.30 1.00-1.20 1.20-1.60 1.30-1.50	 6-20 0.001-0.06 0.6-2 0.6-2 2-6	 0.05-0.35 0.25-0.30 0.20-0.22 0.15-0.22 0.10-0.14	10.0-2.9	85-95 60-85 4.0-8.0 1.0-5.0 1.0-3.0	 .37 .43 .20	 .37 .43 .37	 5 	 8 	 0
Noonku	 0-2 2-6 6-47 47-72	 0.07-0.18 1.10-1.20 1.10-1.20 1.40-1.70	 0.6-2 0.6-2 0.6-2 6-20	 0.35-0.50 0.20-0.25 0.15-0.18 0.03-0.04	0.0-2.9 0.0-2.9	 75-90 2.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	 3 	 2 	 134
142: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9 0.0-2.9	85-95 2.0-8.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
143: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	10.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
144: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
145: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 	10.0-2.9	 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	। I Depth	l I Moist	Permeability	l l Available	। Linear	l l Organic	l	on factor	S	l _l Wind	l l Wind
and soil name	 	l bulk l density	 	water capacity	lextensi- l bility	matter	i I Kw	 Kf	 T 	l erodibility	
	In.	g/cc	I In/Hr	In/In	Pct.	Pct.	į	<u> </u>	<u> </u>	į	
146:	l I		1			İ					
Minto	0-5 5-9 9-16 16-72	0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	6-20 0.6-2 0.6-2 0.6-2	0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	10.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	5 	2 	134
Chatanika	0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.21-0.23 0.21-0.23	10.0-2.9	85-95 7.0-12 1.0-5.0	 .37 .43 	 .37 .43 	 4 	 2 	 134
147:	i	i	İ	i	i	İ	i	i	i	<u> </u>	!
Minto	0-5 5-9 9-16 16-72	0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	6-20 0.6-2 0.6-2 0.6-2	10.05-0.35 10.20-0.24 10.21-0.23 10.21-0.23	10.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	5 	2 	134
Chatanika	0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.21-0.23 0.21-0.23	10.0-2.9	85-95 7.0-12 1.0-5.0	 .37 .43 	 .37 .43 	 4 	 2 	 134
148:	i	i	İ	i	i	i	i	i	i	<u> </u>	!
Minto	0-5 5-9 9-16 16-72	0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	6-20 0.6-2 0.6-2 0.6-2	10.05-0.35 10.20-0.24 10.21-0.23 10.21-0.23	0.0-2.9 0.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	5 	2 	134
Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.21-0.23 0.21-0.23 		85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
149:	l	1	1	1		1				1	
Mosquito	0-18 18-24 24-72	0.05-0.10 0.80-1.40 	6-20 0.6-2 0.000-0.001	0.05-0.35 0.24-0.28 	0.0-2.9	85-95 5.0-20 	 .37 	 .37 	1 	8 	0
150: Mosquito	 0-18 18-24 24-72	 0.05-0.10 0.80-1.40 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.24-0.28 	 0.0-2.9 	 85-95 5.0-20 	 .37 	 .37 	 1 	 8 	 0
Noonku	 0-2 2-6 6-47 47-72	 0.07-0.18 1.10-1.20 1.10-1.20 1.40-1.70	0.6-2 0.6-2 0.6-2 6-20	 0.35-0.50 0.20-0.25 0.15-0.18 0.03-0.04	10.0-2.9	75-90 2.0-6.0 1.0-5.0 0.0-1.0	.37 .32 .05	 .37 .32 .28	 3 	 2 	 134
151: Noonku	 0-2 2-6 6-47 47-72	 0.07-0.18 1.10-1.20 1.10-1.20 1.40-1.70	l 0.6-2 l 0.6-2	 0.35-0.50 0.20-0.25 0.15-0.18 0.03-0.04	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .32 .05	 .37 .32 .28	 3 	 2 	 134
152: North Pole	 0-2 2-4 4-39 39-72	 0.05-0.10 0.20-0.30 1.20-1.60 1.40-1.70	0.001-0.06 0.6-2	 0.05-0.35 0.25-0.30 0.15-0.22 0.03-0.05	 0.0-2.9		 .43 .05	 .43 .28	 2 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	l Permeability	l l Available		l l Organic	IErosio	on factors	.	l _l Wind	l l Wind
and soil name	 	l bulk l density	 	water capacity	lextensi- l bility	l matter l	l l Kw l	 Kf 	 T 	l erodibility l group	l erodibility l index l
	l In.	l g/cc	l In/Hr	l In/In	Pct.	Pct.	 	l I	 	 	
153: North Pole	 0-2 2-4 4-39 39-72	 0.05-0.10 0.20-0.30 1.20-1.60 1.40-1.70	 6-20 0.001-0.06 0.6-2 6-20	 0.05-0.35 0.25-0.30 0.15-0.22 0.03-0.05		 85-95 60-85 1.0-5.0 0.0-1.0	 .43 .05	 .43 .28	 2 	 2 	 134
Mosquito	 0-18 18-24 24-72	 0.05-0.10 0.80-1.40 		 0.05-0.35 0.24-0.28 		85-95 5.0-20 	 .37 	 .37 	 1 	8 	 0
Liscum	0-3 3-11 11-15 15-70 70-72	 0.05-0.10 0.20-0.30 1.00-1.20 1.20-1.60 1.30-1.50	0.001-0.06 0.6-2 0.6-2	 0.05-0.35 0.25-0.30 0.20-0.22 0.15-0.22 0.10-0.14	0.0-2.9	85-95 60-85 4.0-8.0 1.0-5.0 1.0-3.0	 .37 .43 .20	 .37 .43 .37	 5 	 8 	 0
154: North Pole	 0-2 2-4 4-39 39-72	 0.05-0.10 0.20-0.30 1.20-1.60 1.40-1.70	0.001-0.06 0.6-2	 0.05-0.35 0.25-0.30 0.15-0.22 0.03-0.05		 85-95 60-85 1.0-5.0 0.0-1.0	 .43 .05	 .43 .28	 2 	 2 	 134
Noonku	 0-2 2-6 6-47 47-72	 0.07-0.18 1.10-1.20 1.10-1.20 1.40-1.70	0.6-2 0.6-2 0.6-2 6-20	 0.35-0.50 0.20-0.25 0.15-0.18 0.03-0.04	0.0-2.9 0.0-2.9	75-90 2.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	 3 	 2 	 134
155: Peede	 0-2 2-72	 0.07-0.18 1.10-1.20	 0.6-2 0.6-2	 0.35-0.50 0.20-0.25	 0.0-2.9	 75-90 1.0-5.0	 .37	 .37	 3 	 2 	 134
156: Peede	 0-2 2-72	 0.07-0.18 1.10-1.20	 0.6-2 0.6-2	0.35-0.50 0.20-0.25	 0.0-2.9	 75-90 1.0-5.0	 .37	 .37	 3 	 2 	 134
Mosquito	 0-18 18-24 24-72	 0.05-0.10 0.80-1.40 	6-20 0.6-2 0.000-0.001	 0.05-0.35 0.24-0.28 	 0.0-2.9 	85-95 5.0-20 	 .37 	 .37 	 1 	 8 	 0
157: Piledriver	 0-3 3-15 15-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	 6-20 0.6-2 0.6-2 6-20	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134
158: Piledriver	 0-3 3-15 15-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9		 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134
Eielson	 0-2 2-49 49-71 71-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	l 0.6-2 l 0.6-2	1 10.05-0.35 10.20-0.22 10.20-0.22 10.02-0.04	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
159: Piledriver	 0-3 3-15 15-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	l 0.6-2 l 0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134
Fubar	 0-2 2-10 10-72	 0.05-0.10 1.20-1.30 1.50-1.60	0.6-2	 0.05-0.35 0.20-0.22 0.03-0.05	0.0-2.9		 .32 .05	 .32 .28	 1 	 2 	 134
160: Pits, gravel	 	 	 	 	 		 	 	 - 	 	

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	 Permeability	l I Available	 Linear	l l Organic	IErosio	on factor	S	l _l Wind	l I Wind
and soil name	 	l bulk l density	 	water capacity 		matter 	 Kw _	 Kf 	 T 	l erodibility	l erodibility l index l
	l In.	l g/cc	l In/Hr	In/In	Pct.	Pct.		1		1	1
161: Pits, quarry			 		 				-		
162: Riverwash			 		 				-		
163: Salchaket	 0-3 3-24 24-45 45-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
164: Salchaket	 0-3 3-24 24-45 45-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
Typic Cryorthents	 0-30 30-63 63-72	 1.30-1.60 1.10-1.30 1.30-1.50	l 6-20	1 10.12-0.15 10.06-0.22 10.05-0.06	0.0-2.9	 3.0-10 0.0-1.0 0.0-1.0	 .24 .05 .05	 .37 .28 .28	 2 	 2 	 134
165: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
166: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
167: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
168: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
Minto	0-5 5-9 9-16 16-72	10.05-0.10 11.10-1.20 11.10-1.20 11.10-1.20	l 0.6-2 l 0.6-2	0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	5 	2 	 134
169: Saulich	 0-16 16-21 21-72		0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 		 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	0.6-2 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
170: Steese	 0-2 2-5 5-27 27-33 33-72	 10.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	1.0-5.0		 .37 .43 .55	 2 	 2 	 134
171: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	l Permeability	l l Available	l l Linear	l I Linear l'Organic	Erosid	on factor	s	l I Wind	l l Wind
and soil name	l I	l bulk l density		l water	lextensi- l bility		 Kw 	 Kf 	l IT I	erodibility	
	l In.	l g/cc	l In/Hr	In/In	Pct.	l Pct.	I		İ	İ	
172: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10	10.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55		 2 	 134
173:	i	İ		i	i	i	i	i	i	i	İ
Steese	0-2 2-5 5-27 27-33 33-72	10.05-0.10 11.10-1.20 11.10-1.20 11.40-1.50 	0.6-2	0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10	10.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	2 	2 	134
174: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	10.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55		 2 	 134
175: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	10.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55	 2 	 2 	 134
176: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	10.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55	 2 	 2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43	 1 	 2 	 134
177: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55	 2 	 2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10	 .37 .43 .43	 1 	 2 	 134
178: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .15			 2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	l Permeability	l l Available	l l Linear	l l Organic	Erosid	on factor	rs 	l _l Wind	l I Wind
and soil name		l bulk l density l	 	l water l capacity l	lextensi- l bility l	matter 	 Kw 	 Kf 	I I T I	l erodibility l group l	l erodibilit l index l
	l In.	l g/cc	I In/Hr	l In/In	Pct.	Pct.					i I
179: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	10.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15	 .37 .43 .55	 2 	 2 	 134
Gilmore	0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	l 0.6-2 l 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
180: Tanacross	 0-9	10.05-0.10	 6-20	10.05-0.35	 	 85-95	 	 	 1	 8	 0
	9-11 11-17 17-72	10.80-1.20 11.20-1.40	0.6-2	0.20-0.22 0.17-0.22 		5.0-10 0.0-1.0 	.37 .43 	.37 .43 	 	 	
181: Tanana	 0-3 3-6 6-25 25-72	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	 0.05-0.35 0.20-0.23 0.20-0.23 		 85-95 2.0-6.0 0.0-2.0 	 .37 .43 	 .37 .43 	 2 	 8 	 0
182: Tanana	 0-3 3-6 6-25 25-72	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	 0.05-0.35 0.20-0.23 0.20-0.23 		 85-95 2.0-6.0 0.0-2.0 	 .37 .43 	 .37 .43 	 2 	 8 	 0
Mosquito	 0-18 18-24 24-72	 0.05-0.10 0.80-1.40 		 0.05-0.35 0.24-0.28 		 85-95 5.0-20 	 .37 	 .37 	 1 	 8 	 0
183:			 	l !	 						
Typic Cryaquents	0-6 6-72	0.07-0.18 1.10-1.30		0.35-0.50 0.20-0.22	0.0-2.9	75-90 1.0-5.0	 .37	 .37	5 	8 	0
Histic Cryaquepts	0-13 13-30 30-72	1 10.05-0.10 11.10-1.30 11.20-1.40	0.6-2	 0.05-0.35 0.21-0.23 0.18-0.23	10.0-2.9	85-95 3.0-7.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 8 	 0
Terric Cryofibrists	 0-28 28-40 40-72	 0.05-0.10 0.20-0.30 1.30-1.45	0.001-0.06	1 10.05-0.35 10.40-0.55 10.20-0.27		 85-95 60-85 5.0-10	 .37	 .37	 1 	 8 	 0
184: Typic Cryorthents	 0-1 1-49 49-72	 0.05-0.10 1.10-1.30 1.30-1.50	0.6-2	 0.05-0.35 0.20-0.22 0.05-0.06	10.0-2.9	 85-95 1.0-3.0 0.0-1.0	 .32 .05	 .32 .28	 3 	 2 	 134
185: Typic Cryorthents, fill	 0-30 30-63 63-72	 1.30-1.60 1.10-1.30 1.30-1.50	l 6-20	 0.12-0.15 0.06-0.22 0.05-0.06	10.0-2.9	0.0-1.0	 .24 .05 .05	 .37 .28 .28	 2 	 2 	 134
Urban land			 				 		-		
186: Urban land	 	 	 	 	 	 	 	 	 - -	 	
187: Water	; 	i 	 	i 	 	 	 	 	 - 	 	

Table 8. Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	l Depth I I I	l Cation l exchange l capacity l	Effective cation exchange capacity	 Soil reaction
	In.	 meq/100 g	meq/100 g	l pH
101: Bolio	 0-12 12-16 16-72	 	 115-155 120-210 	 3.6-5.5 3.6-6.0 3.6-6.0
102: Bradway	 0-7 7-10 10-26 26-72	 115-155 15-30 1-10 	 	 5.6-6.5 5.6-6.5 7.4-7.8
103: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	15-30	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
104: Chatanika	 0-4 4-6 6-21 21-72	 5-15 		 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
105: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	15-30	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
106: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	 115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
107: Chatanika	4-6 6-21 21-72	 5-15 	 115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
Goldstream	 0-9 9-12 12-20 20-72	 		 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
108: Chena	 0-4 4-9 9-72	 115-155 5-20 1-5	 	 5.1-6.0 5.6-6.5 5.6-6.5
109: Dumps, landfill	 	<u> </u>	<u> </u>	i I —- I
110: Dumps, mine	 	i 	 —	
111: Eielson	 0-2 2-49 49-71 71-72	 115-155 15-30 1-5 1-5	 	 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6
112: Eielson	 0-2 2-49 49-71 71-72	 115-155 15-30 1-5 1-5		 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	I Depth I I	exchange capacity		 Soil reaction
	 In.	l meq/100 g	l meq/100 g	l pH
	 0-3 3-15 15-33 33-72	 115-155 15-30 5-15 1-5	—- —-	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
	 0-2 2-49 49-71 71-72	 115-155 15-30 1-5 1-5	 !	 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6
Tanana		115-155 15-30 5-20 —-	 	 4.5-5.0 5.1-6.0 5.6-7.3 6.6-7.3
	 0-9 9-12 12-21 21-72	I —	15-30 10-25	 3.6-4.5 4.5-5.5 4.6-5.8 —-
	 0-9 9-12 12-21 21-72	 	15-30	 3.6-4.5 4.5-5.5 4.6-5.8
	 0-3 3-30 30-72	 115-155 15-30 5-15	! 	 5.6-6.0 5.6-6.0 6.1-7.3
	 0-3 3-30 30-72	 115-155 15-30 5-15	l —-	 5.6-6.0 5.6-6.0 6.1-7.3
	 0-3 3-30 30-72	 115-155 15-30 5-15	l —-	 5.6-6.0 5.6-6.0 6.1-7.3
	 0-3 3-30 30-72	 115-155 15-30 5-15	I —-	 5.6-6.0 5.6-6.0 6.1-7.3
120: Fairbanks	 0-3 3-30 30-72 	 115-155 15-30 5-15 	l —-	 5.6-6.0 5.6-6.0 6.1-7.3
sloping	 0-3 3-30 30-72	 115-155 15-30 5-15	 	 5.6-6.0 5.6-6.0 6.1-7.3
	•	115-155 15-30 5-15	 	5.6-6.0 5.6-6.0 6.1-7.3

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	I I Depth I I	Cation cxchange capacity	Effective cation exchange capacity	I I Soil I reaction I I
	In.	meq/100 g	meq/100 g	l pH
122: Fairbanks	 0-3 3-30 30-72	 115-155 15-30 5-15	 	 5.6-6.0 5.6-6.0 6.1-7.3
Steese	2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-
123: Fairbanks	3-30 30-72	 115-155 15-30 5-15	 	 5.6-6.0 5.6-6.0 6.1-7.3
Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-
124:			!	
Fubar	0-2 2-10 10-72 	115-155 5-10 1-5	—- —- —-	5.1-6.1 5.6-6.5 5.6-7.3
Piledriver	0-3 3-15 15-33 33-72	115-155 15-30 5-15 1-5	 	5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
125: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5	 	 15.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5 —-
126: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 —-		 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5 —-
127: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 —-	 	 15.1-6.0 15.6-6.0 15.6-6.0 6.1-6.5
128: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5 —-
129: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5 —

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	I I Depth I I I	Cation cation cachange capacity	cation	I Soil reaction
	In.	meq/100 g	meq/100 g	l pH
130: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 —-	— — —	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
131: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 —-	— — —	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
	 0-9 9-12 12-21 21-72	 	15-30 10-25	 3.6-4.5 4.5-5.5 4.6-5.8
132: Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
	 0-9 9-12 12-20 20-72	 	15-30 5-15 —-	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
134: Goldstream	 0-9 9-12 12-20 20-72	i 	15-30 5-15	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
135: Goldstream	 0-9 9-12 12-20 20-72	 	15-30 5-15 —-	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
Histels		 	115-155 120-210 	 3.6-4.5 3.6-5.0 3.6-5.0 5.1-6.0
	 0-12 12-17 17-26 26-72	 	115-155 120-210 	 3.6-4.5 3.6-5.0 3.6-5.0 5.1-6.0
137: Jarvis	İ	 115-155 15-30 1-5 1-5	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth I I I	Cation exchange capacity	cation	Soil reaction
	In.	l meq/100 g	meq/100 g	' pH
138: Jarvis	3-6 6-24 24-72	 115-155 15-30 1-5 1-5	—- —- —-	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
Chena	 - 0-4 4-9 9-72	 115-155 5-20 1-5	 	 5.1-6.0 5.6-6.5 5.6-6.5
139: Jarvis	 - 0-3 3-6 6-24 24-72	 115-155 15-30 1-5 1-5	i 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
Salchaket	 - 0-3 3-24 24-45 45-72	 15-30 5-15 1-5	115-155 	 4.5-5.6 5.1-6.0 5.6-7.3 6.1-7.3
140: Lemeta	i	 	!	 4.5-5.0 5.1-6.1
141: Liscum	3-11 11-15 15-70 70-72	 115-155 120-240 5-25 5-10	 15-30 	 6.1-7.3 6.1-7.3 4.5-5.5 6.1-7.3 6.1-7.3
Noonku	 - 0-2 2-6 6-47 47-72	 120-210 5-30 5-10 1-5	 	 6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
142: Minto	 - 0-5 5-9 9-16 16-72	 5-15	15-30 5-15	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
143: Minto	 - 0-5 5-9 9-16 16-72	 5-15	15-30 5-15	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
144: Minto	 0-5 5-9 9-16 16-72	 5-15	15-30 5-15 —-	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
145: Minto	 - 0-5 5-9 9-16 16-72	 5-15	 115-155 15-30 5-15 	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
Chatanika	 - 0-4 4-6 6-21 21-72	 5-15 	115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	I Depth 	Cation cation cation cation cation capacity capacity	cation	 Soil reaction
	 In. 	l meq/100 g	l meq/100 g	ı I pH I
146: Minto	 0-5 5-9 9-16 16-72	I —	15-30 5-15	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
	 0-4 4-6 6-21 21-72		15-30 —-	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
	5-9 9-16 16-72	I —	15-30 5-15 —-	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
	 0-4 4-6 6-21 21-72 		115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
	5-9 9-16 16-72	<u> </u> —	15-30 5-15 —-	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
Chatanika	 0-4 4-6 6-21 21-72	 5-15 	115-155 15-30 —-	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
	 0-18 18-24 24-72 	 115-155 30-50 	!	 5.1-6.1 5.6-6.6 5.6-6.6
	 0-18 18-24 24-72 	 115-155 30-50 —-	— —	 5.1-6.1 5.6-6.6 5.6-6.6
Noonku		120-210 5-30 5-10 1-5	 	6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
151: Noonku	 0-2 2-6 6-47 47-72	 120-210 5-30 5-10 1-5	— — ! —	 6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
152: North Pole	 0-2 2-4 4-39 39-72	 115-155 120-240 5-25 1-5	 	 6.1-7.3 6.1-7.3 6.1-7.3 6.1-7.3

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity		 Soil reaction
	In.	_ meq/100 g	meq/100 g	l pH
153: North Pole	2-4 4-39 39-72	 1115-155 120-240 5-25 1-5	—- —- —	 6.1-7.3 6.1-7.3 6.1-7.3 6.1-7.3
Mosquito	18-24 24-72	115-155 30-50 —-	— — —	 5.1-6.1 5.6-6.6 5.6-6.6
Liscum	 0-3 3-11 11-15 15-70 70-72	 115-155 120-240 5-25 5-10	 15-30 	 6.1-7.3 6.1-7.3 4.5-5.5 6.1-7.3 6.1-7.3
154: North Pole	2-4 4-39 39-72	 115-155 120-240 5-25 1-5	 !	 6.1-7.3 6.1-7.3 6.1-7.3
Noonku	 0-2 2-6 6-47 47-72	 120-210 5-30 5-10 1-5	 	 6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
155: Peede	 0-2 2-72 	 120-210 5-9 		 6.1-7.3 6.1-7.3
156: Peede	1 2-72	 120-210 5-9	I —-	 6.1-7.3 6.1-7.3
Mosquito	 0-18 18-24 24-72	115-155 30-50 	<u> </u>	 5.1-6.1 5.6-6.6 5.6-6.6
157: Piledriver	 0-3 3-15 15-33 33-72	 115-155 15-30 5-15 1-5		 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
158: Piledriver	 0-3 3-15 15-33 33-72	 115-155 15-30 5-15 1-5		 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
Eielson		 115-155 15-30 1-5 1-5	— — —	5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6
159: Piledriver	3-15 15-33 33-72	 115-155 15-30 5-15 1-5	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
Fubar	 0-2 2-10 10-72	 115-155 5-10 1-5	<u> </u>	 5.1-6.1 5.6-6.5 5.6-7.3
160: Pits, gravel			i 	:

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	I Depth I I I	Cation cxchange capacity	Effective cation exchange capacity	 Soil reaction
	In.	meq/100 g	l meq/100 g	l pH
161: Quarry pits	-	ļ —	<u> </u> —	
162: Riverwash	-	<u> </u>	<u> </u> —	
163: Salchaket	 - 0-3 3-24 24-45 45-72	 15-30 5-15 1-5		
164: Salchaket	3-24 24-45 45-72	 15-30 5-15 1-5		 4.5-5.6 5.1-6.0 5.6-7.3 6.1-7.3
Typic Cryorthents	 - 0-30 30-63 63-72	 5-15 5-15 5-10	— — —	 6.1-7.3 6.1-7.8 6.1-7.8
165: Saulich	 - 0-16 16-21 21-72	 15-30 	 115-155 	 4.5-5.5 5.1-6.6 6.1-7.3
166: Saulich	 - 0-16 16-21 21-72	 15-30 	I —-	 4.5-5.5 5.1-6.6 6.1-7.3
167: Saulich	 - 0-16 16-21 21-72	 15-30 	I —-	 4.5-5.5 5.1-6.6 6.1-7.3
168: Saulich	16-21 21-72	 15-30 	I —-	 4.5-5.5 5.1-6.6 6.1-7.3
Minto	 - 0-5 5-9 9-16 16-72	 5-15	15-30	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
169: Saulich	16-21 21-72	 15-30 	115-155 	 4.5-5.5 5.1-6.6 6.1-7.3
Minto	 - 0-5 5-9 9-16 16-72	 5-15	l 5-15	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
170: Steese	 - 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 		 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
171: Steese	 - 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	—- —-	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth I I I	Cation capacity capacity	cation	 Soil reaction
	In.	l meq/100 g	meq/100 g	l pH
172: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 —-	 	
173: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	—- —- —-	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-
174: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
175: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 —-	— — —	
176: Steese	2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-
Gilmore	 0-3 3-6 6-12 12-19 19-72	115-155 15-30 1-5 1-5 	—- —- —-	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
177: Steese	2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 —-	—- —- —-	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-
Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 	— — —	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5 —
178: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
Gilmore		115-155 15-30 1-5 1-5 	— — —	5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth Depth I I	Cation cation cachange capacity	cation	 Soil reaction
	l In.	meq/100 g	meq/100 g	l pH
179: Steese	2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	—- —- —-	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5 —-
Gilmore	 0-3 3-6 6-12 12-19 19-72 	 115-155 15-30 1-5 1-5 —-	-	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5 —
180: Tanacross	 0-9 9-11 11-17 17-72	 20-40 5-20 	—- —- —-	 3.5-5.0 5.1-6.0 5.1-6.0 5.1-6.0
	 0-3 3-6 6-25 25-72	 115-155 15-30 5-20 	 	 4.5-5.0 5.1-6.0 5.6-7.3 6.6-7.3
	3-6 6-25 25-72	 115-155 15-30 5-20 —-	 	 4.5-5.0 5.1-6.0 5.6-7.3 6.6-7.3
Mosquito	 0-18 18-24 24-72	115-155 30-50 	 	 5.1-6.1 5.6-6.6 5.6-6.6
183: Typic Cryaquents	 0-6 6-72	 120-210 15-30	 	 5.6-7.3 6.1-7.3
	l 13-30 l 30-72	—- 5-15 5-15	115-155 	 4.5-5.6 5.1-6.0 5.5-6.1
Terric Cryofibrists	 0-28 28-40 40-72 	115-155 120-240 30-50	 	 5.0-6.0 5.6-6.6 5.6-6.6
184: Typic Cryorthents	i	 115-155 10-20 5-10	 	 5.5-6.6 6.1-7.3 6.1-7.3
185: Typic Cryorthents, fill	 0-30 30-63 63-72	 5-15 5-15 5-10	I	 6.1-7.3 6.1-7.8 6.1-7.8
Urban land	ļ —	<u> </u> —	<u> </u> —	 —-
186: Urban land	i 	<u> </u> –	<u> </u> —	
187: Water	 			

Table 9. Water Features

(See text for definitions of terms used in this table. Ponding depth is the estimated range in the depth of water on the surface. Soil moisture status depth is the upper and lower depth below the soil surface.)

Map symbol	l Hydro l logic	l Month	l Flood	ling		Ponding		Soil Moisture Status		
and soil name	l group	i I	Frequency	Duration	IFrequency	Duration	l Depth	l Depth	Status	
			İ				l In.	l In.		
01:	i	i	İ			İ	i	i	i	
olio	l D	lApr Jun I	l Rare	Brief	l Frequent	l Long	12 0 	0 8 8 72	lWet lWet, frozen	
	i	IJul Sep	Rare	l Brief	i	i	i	105	lMoist	
	l	1		1	l I			5 16 16 72	lWet lWet, frozen	
	į	į	į	į	į	į	į			
)2: radway	l D	l IApr Jun	l lOccasional	l I Brief	l I Frequent	l l Long	 12 0	l l 0 24	l lWet	
•				 Duint		1		24 72	Wet, frozen	
	İ	lJul Sep I	Occasional	l Brief I	l Frequent I	l Long l	l 12 0 l	0 26 26 72	lWet lWet, frozen	
03:	1	1			1	1	I	1	1	
hatanika	İ D	Apr May	None	į	Frequent	Long	40	0 12	lWet	
		l IJun Sep	l None	1	-	1		12 72 0 8	lWet, frozen lMoist	
	į			į	į	į	į	1821	lWet	
	l I	1	1	1		1	1	21 72 	lWet, frozen	
)4: :hatanika		l Apr May	l I None		l I Frequent	l I Long	l l 40	 0 12	l lWet	
natanika	I D	1 1	1		Frequent	l	1 4 0	12 72	lWet, frozen	
		Jun Sep	l None		I			0 8 8 21	lMoist lWet	
	i	i	i		i	İ	i	21 72	Wet, frozen	
05:	l I	 	 			 		l I		
hatanika	D	Apr May	None	İ	Frequent	Long	1 4 0	0 12	Wet	
		I Jun Sep	l None		i			12 72 0 8	lWet, frozen lMoist	
	į				į	İ	İ	1821	lWet	
	l I	 						21 72 	lWet, frozen	
06: Chatanika	l D	l IApr May	l I None		l I Frequent	l I Long	 40	 0 12	l lWet	
ilatailina		1	1	i		l	1 4 0	12 72	lWet, frozen	
	l	Jun Sep	l None		I	1		0 8 8 21	lMoist lWet	
	į	į	į	į	į	į	į	21 72	Wet, frozen	
07:	l I	 						l		
chatanika	D	Apr May	None	1	Frequent	l Long	40	0 12 12 72	lWet lWet, frozen	
	i	Jun Sep	None		i	i	İ	108	lMoist	
	I	1						8 21 21 72	lWet lWet, frozen	
	i	i	i		i	i	i	1	1	
oldstream	D	lApr Jun I	l None	1	l Frequent	l Long	l 12 0 l	0 10 10 72	lWet lWet, frozen	
	i	IJul Sep	None	i	i	i	i	108	lMoist	
		1			-	1		8 20 20 72	lWet lWet, frozen	
00.	į	İ			į	İ	İ	İ		
)8: :hena	A	IApr Sep	l Rare	l Brief	l None			0 72	Dry to moist	
1:		1			į.	1	1	1	1	
ielson	В	Apr	Occasional	Brief	Frequent	Long	60	0 4	lWet	
	I	1		1		1	l I	4 14 14 47	lWet, frozen lMoist	
	į	į	į_	į	<u>i</u> _	į.	į	1 47 72	lWet	
	l I	l May	Occasional	Brief 	l Frequent	l Long	60 	0 8 8 18	lWet lWet, frozen	
	į	į	į	į	į	į	į	18 47	lMoist	
	l I	l IJun Sep	l lOccasional	l I Brief		1	I	47 72 0 47	IWet IDry to moist	
		iouri Geb	Occasional	i Dilei	!	:	!	1 47 72	Wet	

Table 9. Water Features—Continued

	Hydro logic	l I Month	l Floodi	ng	F	Ponding		Soil Mo	isture Status
and soil name	l group		 Frequency	l Duration	 Frequency	Duration	l Depth	Depth	Status
112:	 	 	 	 	 	 	In. 	In. In. 	
Eielson	B 	Apr 	Occasional 	Brief 	Frequent 	Long	 	0 4 4 14 14 47 47 72	IWet IWet, frozen IMoist IWet
	 	May Jun Sep	IOccasional	Brief 	Frequent	Long	60 	0 8 8 18 18 47 47 72 0 47	IWet IWet, frozen IMoist IWet
	 	l I	Occasional 	Brief 				47 72 	IDry to moist IWet
Piledriver	B 	Apr 	Rare 	Brief 	Frequent 	Long I I		0 4 4 14 14 47 47 72	IWet IWet, frozen IMoist IWet
	 	l May l l	I Rare I I	Brief 	Frequent 	l Long l l	 	0 12 12 22 22 47 47 72	Wet Wet, frozen Moist Wet
	 	lJun Sep I I	Rare 	Brief 	 	 		0 47 47 72 	IDry to moist IWet I
113: Eielson	 B 	 Apr 	l lOccasional l	 Brief 	 Frequent 	 Long 	1	 0 4 4 14 14 47	 Wet Wet, frozen Moist
	 	 May 	 Occasional 	I Brief 	 Frequent 	Long	60 	47 72 0 8 8 18 18 47 47 72	IWet IWet IWet, frozen IMoist IWet
	 	I IJun Sep I	 Occasional 	 Brief 			1	0 47 0 47 47 72	Dry to moist Wet
Tanana	l D	lApr May I	 Rare 	l Brief	 Frequent 	l Long		 0 12 12 72	 Wet Wet, frozen
	 	l Jun l	Rare	Brief	!	! !	1	0 6 6 18	lMoist lWet
	 	I IJul Sep I I	I Rare I	l l Brief l	 		1	18 72 0 12 12 25 25 72	IWet, frozen IMoist IWet IWet, frozen
114: Ester	 D 	I I IApr Sep I	I I None I	 	I I None I		1	 0 4 4 9 9 72	I IMoist IWet IWet, frozen
115: Ester	 D 	I I IApr Sep I	I I None I	 	I I None I		 	 0 4 4 9 9 72	 Moist Wet Wet, frozen
116: Fairbanks	 B 	l I IApr Sep	I I None	 	I I None	 	 	 0 72	I IDry to moist
117: Fairbanks	 B 	I IApr Sep I	 None 	 	 None		 	 0 72 	 Dry to moist
118: Fairbanks	 B 	I IApr Sep I	l I None	 	l None	 	 	 0 72 	Dry to moist
119: Fairbanks	 B 	l IApr Sep I	l None	 	l None	 	 	 0 72 	 Dry to moist
120: Fairbanks	 B 	l IApr Sep I	 None 	 	l None	 	 	 0 72 	 Dry to moist

Table 9. Water Features—Continued

Manaymbal	l Hydro	l Month	l Flood	ling		Ponding		Soil Moisture Status		
Map symbol and soil name	l logic l group		IFrequency	Duration	IFrequency	Duration	l Depth	Depth	l Status	
	 i	 	i	i I		İ		In.	 	
121: Fairbanks, stronglysloping	.I В .I	I IApr Sep	 None	 	l I None I	i ! !	<u>.</u> !	 0 72 	 Dry to moist 	
Fairbanks, steep	I .I В I	I IApr Sep I	I I None	 	l I None		 	l l 0 72 l	I IDry to moist	
122: Fairbanks	і .l В	l IApr Sep	 None	į	l None		į !	0 72	Dry to moist	
Steese	I .I В I	I IApr Sep I	l None	 	l I None			l l 0 72 l	I IDry to moist I	
123: Fairbanks	і .l В	l IApr Sep	 None	İ	l I None		!	0 72	Dry to moist	
Steese	I .I В I	I IApr Sep I	l None	 	l I None I			 0 72 	I IDry to moist I	
124: Fubar	.i C	I IApr Sep	 Rare	l Brief	l None	i !		 0 54 54 72	Dry to moist	
Piledriver	 B 	l Apr l	 Rare 	l Brief I	l Frequent I	l Long l	 60 	 0 4 4 14 14 47	l Wet Wet, frozen Moist	
	 	 May 	I Rare I I	l Brief 	I I Frequent I I	l I Long I I	 60 	47 72 0 12 12 22 22 47 47 72	IWet IWet IWet, frozen IMoist IWet	
	 	lJun Sep	Rare	Brief 				0 47 47 72	IDry to moist IWet	
125: Gilmore	 .l D 	I IApr Sep	 None	 	l None	 		 0 72 	IDry to moist	
126: Gilmore	 . D	l IApr Sep	 None	1	l I None			 0 72	I IDry to moist	
127: Gilmore	 	IApr Sep	 None	 	l None	! 		 0 72	Dry to moist	
128: Gilmore	.I D	IApr Sep	 None	 	l None	 		 0 72	Dry to moist	
129: Gilmore	.l D	I Apr Sep	 None	 	l None			0 72	Dry to moist	
130: Gilmore	.l D	I Apr Sep	 None		l None			0 72	Dry to moist	
131: Gilmore	 D	I Apr Sep	l None	 	l I None			 0 72	l IDry to moist	
Ester	 . D 	I IApr Sep I I	I None I		l I None I I	 		 0 4 4 9 9 72	 Moist Wet Wet, frozen	
132: Gilmore	.l D	I Apr Sep	 None	i !	l None			0 72	l IDry to moist	
Steese	 . B 	I IApr Sep	l None	 	l I None			 0 72 	l IDry to moist	
133: Goldstream	 D 	l Apr Jun 	 None 	 	l I Frequent I	l Long 	 12 0 	 0 10 10 72	 Wet Wet, frozen	
	 	IJul Sep I I	None 	 	 	 	 	0 8 8 20 20 72 	IMoist IWet IWet, frozen	

Table 9. Water Features—Continued

	l Hydro l logic	l I Month	l Flood	ling		Ponding		Soil Moisture Status		
	l group		 Frequency	Duration	IFrequency	Duration	l Depth	Depth	Status	
	 	i I				İ	l In.	l In.	 	
34: Goldstream	 D 	 Apr Jun Jul Sep 	None None		 Frequent 	l Long l l l	 12 0 	 0 10 10 72 0 8 8 20 20 72 	 Wet Wet, frozen Moist Wet Wet, frozen	
35: Goldstream	 D 	 Apr Jun Jul Sep 	I None I None I I		 Frequent 	Long L	 12 0 	 0 10 10 72 0 8 8 20 20 72	 Wet Wet, frozen Moist Wet Wet, frozen	
Histels	 D 	I Apr Jun Jul Sep 	None None 	 	 Frequent 	l Long l l	 12 0 	 0 10 10 72 0 17 17 72		
36: Histels	 D 	l IApr Jun I IJul Sep I	None None		i Frequent 	Long	 12 0 	 0 10 10 72 0 17 17 72	 Wet Wet, frozen Wet Wet, frozen	
37: Jarvis	 B 	l Apr May 	 Rare Rare	 Brief Brief	l Occasional 	Long L	 40 	 0 12 12 22 22 72 0 16 16 24	 Wet Wet, frozen Dry to moist Wet Wet, frozen	
38:	 -	l IJun Sep I	 Rare 	 Brief 		 	 	24 72 0 72 	IDry to moist IDry to moist I	
arvis	 B	Apr May Jun Sep	Rare Rare Rare	Brief Brief Brief	lOccasional 	Long 	40 	0 12 12 22 22 72 0 16 16 24 24 72 0 72	IWet IWet, frozen IDry to moist IWet IWet, frozen IDry to moist IDry to moist	
Chena	l l A	I IApr Sep	 Rare	l Brief	l I None	 	İ	1 0 72	Dry to moist	
39: Jarvis	 B 	l Apr I I May	 Rare Rare	l Brief I I Brief	 Occasional 	l Long	 40 	 0 12 12 22 22 72 0 16	 Wet Wet, frozen Dry to moist Wet	
	 	l I IJun Sep	l Rare	l I I Brief		i !	i	1 16 24 1 24 72 1 0 72	IWet, frozen IDry to moist IDry to moist	
Salchaket	I	 Apr	Rare	Brief	l I Frequent I	l Long	 60 	0 /2 0 8 8 18	 Wet Wet, frozen	
	 	l I May I I IJun Sep	 Rare Rare	l Brief I I Brief	l I Frequent I I	l Long l	 60 	18 72 0 12 12 22 22 72 0 72	IDry to moist IWet IWet, frozen IDry to moist IDry to moist	
40: .emeta	 D 	l IApr Jun I IJul Sep	I I Rare I Rare	l I Brief I Brief	I I I Frequent I	l Long	 120 	 0 20 20 72 0 20 20 72	 Wet Wet, frozen Wet Wet, frozen	

Table 9. Water Features—Continued

	Hydro logic	 Month	l Flood	ling		Ponding		Soil M	oisture Status
and soil name	group		Frequency	Duration		Duration	l Depth	Depth	Status
	 	' 	i	i	i	i i	In.	l In.	i
11: iscum	 D 	l I Apr I	 Rare 	 Brief	 Frequent 	Long	 12 0 	 0 4 4 14 14 72	 Wet Wet, frozen Wet
	 	May 	Rare	Brief	 Frequent 	Long	120	4 12 12 22 22 72	IWet IWet, frozen IWet
	 	l Jun I	Rare	 Brief 	 Frequent 	Long	120	0 18 1 18 20 1 20 72	IWet IWet, frozen IWet
	' 	Jul Sep	Rare	 Brief 				1 0 4	IMoist IWet
oonku	D 	l Apr	Occasional	Brief	Frequent	Long	120	0 4 4 14 1 14 72	lWet lWet, frozen lWet
	' 	l May	Occasional	 Brief 	Frequent	Long	120	4 12 12 22 22 72	IWet IWet, frozen IWet
	, 	l Jun	Occasional	 Brief 	Frequent	Long	120	0 18 1 18 20 1 20 72	IWet IWet, frozen IWet
		lJul Sep	lOccasional	l Brief		i i	i 	0 8 8 72	lMoist lWet
12: flinto	 B 	l Apr I Apr I	 None 		 None 	 	 	0 4 4 20 20 30	 Moist Wet Wet, frozen
	 	l I May I	None	 	I I None I			30 72 0 8 8 20 20 30	IDry to mois IMoist IWet IWet, frozen
40	 	IJun Sep	None		None			30 72 0 72 	IDry to mois
l3: linto	 B 	l Apr l	None		l None			0 4 1 4 20 1 20 30	I IMoist IWet IWet, frozen
	 	l I May I	 None 	 	l I None I	 	 	30 72 0 8 8 20 20 30	IDry to mois IMoist IWet IWet, frozen
	 	l IJun Sep I	l I None I	 	l I None I	 	 	30 72 0 72 	IDry to mois IDry to mois I
14: linto	 B 	l I Apr I	 None 	 	l None I		 	 0 4 4 20 20 30	l IMoist IWet IWet, frozen
	 	 May 	 None 	 	l None	 	 	30 72 0 8 8 20 20 30	IDry to mois IMoist IWet IWet, frozen
	 	l IJun Sep	l None	 	l I None	 		30 72 0 72	IDry to mois

Table 9. Water Features—Continued

Man armital	l Hydro		l Flood	ding	!	Ponding		Soil Moisture Status		
Map symbol and soil name	l logic l group	Month 	IFrequency	Duration	IFrequency	Duration	I Depth	l Depth	l Status	
	 	' 	 		i	 	 In. 	-	- ' <u></u> 	
145: Minto	i .l B l	 Apr 	I None	 	l I None I	 	i 	 0 4 4 20 20 30	 Moist Wet Wet, frozen	
	 	 May 	 None 		l None l	 		30 72 0 8 8 20 20 30 30 72	IDry to moist IMoist IWet IWet, frozen IDry to moist	
		Jun Sep	None		None		į	1 0 72	Dry to moist	
Chatanika	I	IApr May I IJun Sep I	None None None		Frequent	Long	40 	0 12 12 72 1 0 8 1 8 21 1 21 72	IWet IWet, frozen IMoist IWet IWet, frozen	
146: Minto	 B 	 Apr 	I I None I		 None 		 	 0 4 4 20 20 30	 Moist Wet Wet, frozen	
	 	 May 	I I None I I	 	 None 	 	 	30 72 0 8 8 20 20 30 30 72	IDry to moist IMoist IWet IWet, frozen IDry to moist	
	1	lJun Sep I	None	1	l None	1	 	0 72 	IDry to moist	
Chatanika	1	IApr May I IJun Sep I	I None I I None I	 	l Frequent 	l Long l l l	40 	0 12 12 72 0 8 8 21 21 72	IWet IWet, frozen IMoist IWet IWet, frozen	
147:	i i		i i	i	į	i	i			
Minto	В 	l Apr I	None	i ! !	l None	i !		0 4 1 4 20 1 20 30	IMoist IWet IWet, frozen	
	 	 May 	None 		l None l	 		1 30 72 1 0 8 1 8 20 1 20 30	IDry to moist IMoist IWet IWet, frozen	
	!	l Jun Sep	 None	 	l l None	 		30 72 0 72	IDry to moist IDry to moist	
Chatanika	I	I IApr May I IJun Sep	I None I None	 	I I Frequent I I	l Long l	 40 	 0 12 12 72 0 8 8 21	l Wet Wet, frozen Moist Wet	
	<u> </u> 	! !	 	į Į	į		į	21 72	IWet, frozen	
148: Minto	 . B 	l Apr l l	None		I I None I	 		 0 4 4 20 20 30	l IMoist IWet IWet, frozen	
	 	l I May I	I None I		l I None I	 		30 72 0 8 8 20 20 30	IDry to moist IMoist IWet IWet, frozen	
	1	l IJun Sep	 None		l I None	1		30 72 0 72	IDry to moist IDry to moist	
Chatanika	1	l IApr May I	 None 		 Frequent 	l l Long l	 40 	 0 12 12 72	l IWet IWet, frozen	
	 	IJun Sep I I	None 	 	 	 		0 8 8 21 21 72 	Moist Wet Wet, frozen 	
149: Mosquito	. . D	l Apr Jun	l I Rare	l l Brief	l I Frequent	l Long	 12 0	1 0 12	l lWet	
	 	l IJul Sep I	l I Rare I	l I Brief I		 	 	12 72 0 24 24 72	lWet, frozen lWet lWet, frozen	

Table 9. Water Features—Continued

Map symbol	Hydro logic	l Month	l Flood	ling	ļ	Ponding		Soil Moisture Status		
and soil name	group		IFrequency	Duration	IFrequency	Duration	l Depth	Depth	Status	
	<u></u>				<u> </u>		l In.	In.	_ '	
50:				1			İ			
losquito	.l D	Apr Jun	Rare	l Brief	Frequent	Long	120	0 12	lWet	
	1	l IJul Sep	l Rare	l I Brief	I	1		12 72 0 24	lWet, frozen lWet	
	i	l Sep	naie	l Dilei	i	i	i	1 0 24	Wet, frozen	
	i	i	i	i	i	i	i		1	
loonku	.l D	l Apr	Occasional	Brief	Frequent	Long	12 0	0 4	lWet	
	1	1	1	1	i i	1		4 14 14 72	lWet, frozen lWet	
	i	May	lOccasional	 Brief	l Frequent	Long	120	4 12	lWet	
	İ	i	1	İ	İ	l	İ	12 22	lWet, frozen	
	!	!	<u> </u>	!	!_	1	1	22 72	lWet	
	1	Jun	lOccasional	Brief	Frequent	l Long	12 0	0 18	Wet_free==	
	i		1	1		i	<u> </u>	18 20 20 72	lWet, frozen lWet	
	i	IJul Sep	lOccasional	I Brief	i	i	i	0 8	lMoist	
	!	!	!	!	Į.	1	1	8 72	lWet	
1:	1	 			i		l I		I I	
	.l D	Apr	Occasional	Brief	Frequent	Long	1120	0 4	lWet	
	1	!	!	!	ļ	1	!	4 14	lWet, frozen	
	1	∣ I May	l Occasional	l Brief	l l Frequent	l Long	l l 12 0	14 72 4 12	lWet lWet	
	i	Way		bilei	lequeiii	l Long	1120	1 12 22	lWet, frozen	
	i	İ	İ	i	i	i	i	122 72	lWet	
	1	Jun	lOccasional	Brief	Frequent	Long	120	0 18	lWet	
	1		!	!				18 20 20 72	lWet, frozen lWet	
	i	IJul Sep	lOccasional	l Brief	i	i	i	1 0 8	lMoist	
	į			į	į	į	į	8 72	lWet	
52:	1	1		1	l I	1	l			
	.l D	l Apr	l Rare	I Brief	I Frequent	l Long	60	0 4	lWet	
	1	Ι .	I	1	1 .	1	I	4 14	lWet, frozen	
	!	 Mass	 Dove	 Dwint	 			1472	lWet lWet	
	1	l May	l Rare	l Brief	l Frequent	l Long	60 	4 12 12 22	Wet, frozen	
	i	i	i	i	i	i	i	22 72	Wet	
	1	l Jun	l Rare	l Brief	l Frequent	l Long	160	0 18	lWet	
	1	!	!	!	!	!	!	18 20	lWet, frozen	
	1	l Jul	l Rare	l Brief	i	1	i	20 72 0 72	lWet lWet	
	i	lAug Sep	l Rare	l Brief	i	i	i	108	lMoist	
	!	.	1		!	1	1	872	Wet	
3:					i		i i			
lorth Pole	.l D	l Apr	l Rare	Brief	Frequent	Long	160	0 4	lWet	
	1	1		I	ļ			4 14	Wet, frozen	
	I	∣ I May	l Rare	l I Brief	। I Frequent	l Long	l l 6 0	14 72 4 12	lWet lWet	
	i							1 12 22	Wet, frozen	
	1	1	1	1	1_	1	1	12272	lWet	
	1	l Jun	Rare	l Brief	l Frequent	Long	60	0 18	Wet_frezen	
	I	1	1	1	l I	I	I I	18 20 20 72	lWet, frozen lWet	
	i	l Jul	l Rare	l Brief	i	i	i	1 0 72	lWet	
	1	lAug Sep	l Rare	l Brief	1	1	I	108	lMoist	
		1	1	1	1	1	1	1 8 72	lWet	
losquito	.l D	lApr Jun	 Rare	l Brief	ا ا Frequent	l Long	1 12 0	0 12	lWet	
	!	1	1	I	į.	!	I	1272	lWet, frozen	
	1	Jul Sep	Rare	l Brief	į.			0 24	Wet_free==	
	I	1	1	1	1	1	I	12472	lWet, frozen	

Table 9. Water Features—Continued

	l Hydro l logic	l I Month	l Flood	ing	1	Ponding		Soil M	oisture Status
	l group		 Frequency 	Duration	IFrequency	Duration	l Depth	Depth	Status
	 	 	 		 		In. 	In. 	
53: Liscum	 D 	l l Apr l	l I Rare I	 Brief 	l I Frequent I	l l Long l	 12 0 	 0 4 4 14	l IWet IWet, frozen
	 	 May 	 Rare 	 Brief 	l I Frequent I	l Long	 12 0 	14 72 4 12 12 22	lWet lWet lWet, frozen
	 	l Jun 	 Rare 	 Brief 	l Frequent	l Long	 12 0 	22 72 0 18 18 20 20 72	Wet Wet Wet, frozen Wet
	 	IJul Sep I	 Rare 	Brief 		 	 	0 4 4 72 	IMoist IWet
54: North Pole	 D 	 Apr 	I Rare I	 Brief 	l I Frequent I	l Long	 60 	 0 4 4 14 14 72	 Wet Wet, frozen Wet
	 	May 	Rare	Brief	l Frequent	Long	60	4 12 12 22 22 72	lWet lWet, frozen lWet
	 	l Jun I	Rare	Brief	 Frequent 	Long	60	0 18 18 20 20 72	IWet IWet, frozen IWet
	 	l Jul lAug Sep l	Rare Rare 	Brief Brief		 	 	0 72 0 8 8 72	Wet Moist Wet
Noonku	 D 	 Apr 	 Occasional 	Brief	 Frequent 	l Long	120	 0 4 4 14 14 72	lWet lWet, frozen lWet
	 	 May 	Occasional	Brief	Frequent	Long	120	4 12 12 22 22 72	IWet IWet, frozen IWet
	 	l Jun l	lOccasional 	 Brief 	l Frequent I	l Long l	 12 0 	0 18 18 20 20 72	IWet IWet, frozen IWet
	 	lJul Sep I I	IOccasional I	Brief 	 	 	 	0 8 8 72 	lMoist IWet I
55: Peede	 D 	 Apr 	 Occasional 	 Brief 	l I Frequent I	l l Long	 12 0 	 0 4 4 14	l lWet lWet, frozen
	 	 May 	 Occasional 	 Brief 	l Frequent I	l Long	 12 0 	14 72 4 12 12 22	Wet Wet Wet, frozen
	 	l Jun I	 Occasional 	 Brief 	 Frequent 	l Long	1120	22 72 0 18 18 20 20 72	Wet Wet Wet, frozen Wet
	 	lJul Sep I	Occasional	Brief	i i	 		0 8 8 72	IMoist IWet
56: Peede	 D 	l I Apr I	l Occasional	 Brief 	l I Frequent I	l Long	 12 0 	 0 4 4 14 14 72	 Wet Wet, frozen Wet
	 	l May	Occasional	Brief	Frequent	Long	120	4 12 12 22	lWet lWet, frozen
	 	l Jun 	 Occasional 	 Brief 	l I Frequent I	l l Long l	 12 0 	22 72 0 18 18 20 20 72	lWet lWet lWet, frozen lWet
	 	IJul Sep I I	Occasional 	Brief 	 		 	0 8 8 72 	lMoist lWet l
Mosquito	l D l	IApr Jun I IJul Sep	l Rare l l Rare	Brief Brief Brief	l Frequent I	l Long	12 0 	0 12 1 12 72 1 0 24	lWet lWet, frozen lWet
	 	 	1	1	İ	1	İ	24 72 	Wet, frozen

Table 9. Water Features—Continued

	l Hydro I logic	l I Month	l Flood	ing		Ponding		Soil Moisture Status		
and soil name	l group		 Frequency 	Duration		Duration	l Depth	Depth	Status	
	 [[! 		 	İ	In.	In.	- ; 	
157: Piledriver	 B 	 Apr 	 Rare 	 Brief 	l I Frequent I	l Long l	 60 	 0 4 4 14 14 47 47 72	l IWet IWet, frozen IMoist IWet	
	 	May 	Rare	Brief	 Frequent 	Long	60	0 12 12 22 22 47 47 72	IWet IWet, frozen IMoist IWet	
	 	IJun Sep I I	Rare 	Brief 		 		0 47 47 72 	IDry to moist IWet	
158: Piledriver	 B 	I I Apr I	I I Rare I	 Brief 	l I Frequent I	l Long l	 60 	 0 4 4 14 14 47 47 72	l IWet IWet, frozen IMoist IWet	
	' 	 May 	 Rare 	Brief 	l Frequent 	l Long l l	60 	0 12 12 22 22 47 47 72	IWet IWet, frozen IMoist IWet	
	 	lJun Sep I	l Rare	Brief	İ	i 	 	0 47 47 72	IDry to moist IWet	
Eielson	 B 	 Apr 	 Occasional 	Brief	 Frequent 	Long	60	0 4 4 14 14 47 47 72	lWet lWet, frozen lMoist lWet	
	 	 May 	lOccasional 	Brief 	 Frequent 	l Long l l	60 	1 47 72 0 8 8 18 18 47 47 72	IWet IWet, frozen IMoist IWet	
	 	lJun Sep I I	Occasional 	Brief 	 	 	 	0 47 47 72 	IDry to moist IWet I	
159: Piledriver	 B 	 Apr 	 Rare 	 Brief 	l I Frequent I	l Long	 60 	 0 4 4 14 14 47	l IWet IWet, frozen IMoist	
	 	 May 	 Rare 	 Brief 	l I Frequent I	l Long l	 60 	47 72 0 12 12 22 22 47	IWet IWet IWet, frozen IMoist	
	 	I IJun Sep I	I I Rare I	 Brief 				47 72 0 47 47 72	Wet Dry to moist Wet	
Fubar	 C 	I IApr Sep I	 Rare 	Brief	None 			1 0 54 1 54 72	IDry to moist IWet	
163: Salchaket	 B 	l Apr I	 Rare 	l I Brief	I Frequent	l Long	 60 	 0 8 8 18 18 72	I Wet Wet, frozen Dry to moist	
	 	 May 	 Rare 	Brief 	l Frequent I	l Long	60 	0 12 12 22 22 72	Wet Wet, frozen Dry to moist	
164:	 	lJun Sep I I	Rare 	Brief 	 	 		0 72 	IDry to moist	
Salchaket	I В I	l Apr l	Rare	Brief 	l Frequent I	l Long	60 	0 8 8 18 18 72	Wet Wet, frozen Dry to moist	
	 	May	Rare	Brief	Frequent 	l Long	60 	0 12 12 22 22 72	IWet IWet, frozen IDry to moist	
Timic On with and	I	Jun Sep	Rare	Brief			 	0 72 0 70	IDry to moist	
Typic Cryorthents		IApr Sep I	Rare 	Brief 	None 			0 72 	IDry to moist	

Table 9. Water Features—Continued

	l Hydro	l Month	l Floodi	ng		l Ponding			Soil Moisture Status		
	l group		 Frequency 	Duration	 Frequency 	Duration	l Depth	Depth	Status		
165:	 	 	 	 	i I	i I	l In.	l In.	 		
Saulich	I	IApr May I IJun Sep I I	None None None I	; 	Frequent 	Long L L L L L L L L L L L L L L L L L L L	40 	0 10 1 10 72 0 8 8 21 21 72	lWet IWet, frozen IMoist IWet IWet, frozen		
166: Saulich	 D 	 Apr May Jun Sep 	 None None 	 	 Frequent 	l Long l l l	 40 	 0 10 10 72 0 8 8 21 21 72	l IWet IWet, frozen IMoist IWet IVet, frozen		
167: Saulich	 D 	I Apr May Jun Sep 	l None None 	 	 Frequent 	Long Long L	 40 	 0 10 10 72 0 8 8 21 21 72	 Wet Wet, frozen Moist Wet Wet, frozen		
168: Saulich	 D 	l Apr May Jun Sep 	 None None 	 	 Frequent 	Long Long L	 40 	 0 10 10 72 0 8 8 21 21 72	 Wet Wet, frozen Moist Wet Wet, frozen		
Minto	 B 	 Apr May Jun Sep	I None I I None I I None I I None I I None	 	None None None None			0 4	I IMoist IWet, frozen IDry to moist IMoist IWet IWet, frozen IDry to moist IDry to moist		
169: Saulich	 D 	 Apr May Jun Sep 	 None None 	 	 Frequent 	 Long 	 40 	 0 10 10 72 0 8 8 21 21 72	 Wet Wet, frozen Moist Wet Wet		
Minto	 B 	 	I None I I None I I I None I I I None I I I I None	 	 None None 		 	0 4 4 20 20 30 30 72 0 8 8 20 20 30 30 72	I IMoist IWet, frozen IDry to moist IMoist IWet IWet, frozen IDry to moist		
170: Steese	 B	IJun Sep I I IApr Sep	None None	 	I None I I I None	 	 	0 72 0 72	IDry to moist I IDry to moist		
171:	 	I I IApr Sep	 None	 	l None	 	 	1 0 72	 Dry to moist		
172: Steese	 B 	l I IApr Sep I	l I None I	 	l I I None	 	 	 0 72	 Dry to moist 		
173: Steese	 B 	l IApr Sep I	l None	 - 	l None	 	 	 0 72 	Dry to moist		
174: Steese	 B 	l IApr Sep I	l I None	 	 None	 	 	 0 72 	l IDry to moist		

Table 9. Water Features—Continued

Map symbol	l Hydro l logic	l Month	l Flood	ling	-	Ponding			Soil Moisture Status		
and soil name	l group	i i	 Frequency	Duration	IFrequency	Duration	l Depth	Depth	Status		
	I	1	1	1		1	l In.	l In.			
75:	<u> </u>	į	į	į	i	į	į	į	<u>i</u>		
teese	B 	IApr Sep I	l None	 	l None	 	l I	0 72 	IDry to moist		
76: Steese		 Anr Con	 None		 None	1	I	 0 72	 Drute moiet		
	1	IApr Sep I	l None I		l None I	i	i	1	IDry to moist		
Gilmore	D	lApr Sep	l None	1	l None	1	l I	0 72 	IDry to moist		
77: Nanaa	l L D	 Any Con	 None		 None	İ	İ		 		
Steese	I B	IApr Sep I	l None I		l None		i	0 72 	IDry to moist		
Gilmore	D	IApr Sep	l None		l None	1	I	l 0 72	IDry to moist		
78:	į		į .	į	į	į	į		<u>.</u>		
Steese	I B	IApr Sep I	l None	 	l None	 	I I	0 72 	IDry to moist		
ilmore	D	Apr Sep	l None	1	l None	1	l I	0 72	IDry to moist		
79:	<u> </u>	<u>.</u>	į	į	į	į	į	į	<u>i</u>		
Steese	B 	IApr Sep I	l None	 	l None	 	l I	0 72 	IDry to moist		
Gilmore	D	Apr Sep	None		l None	1	I	0 72	IDry to moist		
80:							i		İ		
anacross	D	IApr May	l Rare	l Brief	l Frequent	l Long	60 	0 8 8 72	lWet lWet, frozen		
	į	Jun Sep	Rare	Brief	į	į	į	0 17	lWet [*]		
		 		 	 	 	l I	17 72 	lWet, frozen		
81: ⁻ anana	 D	l IApr May	l I Rare	l I Brief	l I Frequent	l I Long	 60	 0 12	l lWet		
alialia		1	1	1		l	1 0 0	1272	lWet, frozen		
		l Jun l	l Rare	l Brief		1	 	0 6 6 18	lMoist lWet		
	İ	 	 	 Drief	İ	İ	İ	18 72 0 12	lWet, frozen lMoist		
	i	lJul Sep I	l Rare	l Brief I		i	i	12 25	lWet		
		 	 	1	 	1	l I	l 25 72 I	lWet, frozen		
32:	į	į	į		į	į.	i		i i		
anana	I	lApr May I	l Rare I	l Brief	l Frequent I	l Long l	60 	0 12 12 72	lWet lWet, frozen		
		l Jun	l Rare	Brief	 	1	1	0 6 6 18	lMoist lWet		
	į	İ	į _	i		į	į	18 72	lWet, frozen		
		lJul Sep I	l Rare	Brief 		1		0 12 12 25	lMoist lWet		
	1	1	1			1	I	25 72	lWet, frozen		
Mosquito	D	lApr Jun	l Rare	l Brief	l Frequent	l Long	1 12 0	0 12	lWet		
		l IJul Sep	l I Rare	l I Brief	 	1	l I	12 72 0 24	lWet, frozen lWet		
	į				į	į	į	24 72	lWet, frozen		
33:		İ							1		
ypic Cryaquents	D	l Apr	Frequent	l Long	l Frequent	l Long	60 	0 4 4 14	lWet lWet, frozen		
	į	į .	<u>.</u>	į.	į .	į.	j	1472	lWet		
		l May l	Frequent	l Long l	l Frequent I	l Long l	60 	0 12 12 22	lWet lWet, frozen		
		l I Jun	l I Frequent	l I Brief	l I Frequent	Llong	 60	22 72 0 18	lWet lWet		
			 		 	l Long l		18 20	lWet, frozen		
	I	l IJul Sep	l I Frequent	l I Brief	l I Frequent	l I Brief	 60	20 72 0 72	lWet lWet		
	i	 						072			

Table 9. Water Features—Continued

	l Hydro l logic	l I Month	l Flood	ding	 	Ponding		Soil M	oisture Status
	group		IFrequency	Duration	IFrequency	Duration	Depth	Depth	Status
							 In.	In.	-
83:	<u> </u>	 		i	i				İ
Histic Cryaquepts	D I	l Apr I	None		l Frequent	l Long	12 0 	0 4 4 14	Wet Wet, frozen
	 	l May I	l None		l Frequent	l Long	 12 0 	14 72 0 12 12 24	IWet IWet IWet, frozen
		l l Jun	l I None		l Frequent	l l Long	 12 0	12472	lWet lWet
		l IJul Sep	l l None					18 22 22 72 0 16	IWet, frozen IWet IMoist
		 		1		 		16 72 	lWet I
Terric Cryofibrists	D I	l Apr l	None 	1	l Frequent I	l Long	12 0 	0 4 4 14 14 72	IWet IWet, frozen IWet
		l May	None	 	l Frequent	Long	120	0 12 12 22	Wet Wet, frozen
		 Jun 	 None 	 	l I Frequent I	l l Long l	 12 0 	22 72 0 18 18 20	lWet lWet lWet, frozen
		l IJul Sep	l None		l I Frequent	l Long	 12 0	20 72 0 72	lWet lWet
84: Гуріс Cryorthents	l B	I Apr Sep	 Rare	l I Brief	l None			0 72	Dry to moist
85: 	 B	I I IApr Sep	l I Rare	l I Brief	l I I None		 	 0 72	I IDry to moist

Table 10. Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol	l Rest	trictive layer		l Subs	idence	Potential for	Risk of corro	sion
and soil name	l I Kind	I Depth I to top	l Hardness	 Initial 	l Total	frost action	Uncoated steel	I IConcrete I
		In. 	 	In. 	In. 	1	 	
101: Bolio	l IPermafrost I	 14-28 	 Strongly cemented	 5-10 	 15-30 	l l High l	l I High I	 High
102: Bradway	 Permafrost 	 18-35 	l IStrongly I cemented			l High	I IModerate I	I IModerate
103: Chatanika	 Permafrost 	 12-39 	l IStrongly I cemented			l l l High l	l Moderate 	I I IModerate I
104: Chatanika	 Permafrost 	 12-39 	l IStrongly I cemented	 	 	l l l High l	l IModerate I	l IModerate I
105: Chatanika	 Permafrost 	 12-39 	l IStrongly I cemented	 		l l l High l	l IModerate I	l IModerate
106: Chatanika	 Permafrost 	 12-39 	l IStrongly I cemented			l I I High I	 Moderate 	l IModerate I
107: Chatanika	l Permafrost 	 12-39 	 Strongly cemented	 		l High	I Moderate	 Moderate
Goldstream	l IPermafrost I	 14-24 	l IStrongly I cemented	 1-6 	 6-12 	l l High l	l l High l	l I High I
108: Chena	l I Inone	 	 	 	 	l l l Low	l IModerate	I IModerate
109: Dumps, landfill	Inone	i 	 	 	 	 	 	i
110: Dumps, mine	l Inone	 	 	 	 	 	 	
111: Eielson	l Inone I	 	 	 	 	l l High l	 Moderate 	 Moderate
112: Eielson	l Inone	 	 	 	 	l I High	l IModerate	l IModerate
Piledriver	l Inone		 	 	 	l l High	l IModerate	l IModerate
113: Eielson	l I Inone	 	 	 	 	l l l High	l I IModerate	l I IModerate
Tanana	l IPermafrost I	 16-47 	l IStrongly I cemented	 		l I High I	l IModerate I	l IModerate I
114: Ester	l IPermafrost	 7-30	l IStrongly	 	 	l l l High	l l l High	l l l High
	l lBedrock (paralithic) l	 14-39 	l cemented Strongly cemented			 	 	
115: Ester	 Permafrost 	 7-30	l IStrongly I cemented	 	 	l High	l High	l I High I
	Bedrock (paralithic) 	14-39 	IStrongly I cemented	Í I I	 	 	 	
116: Fairbanks	l Inone	i 	 	i 	i 	l High	I Moderate	I Moderate

Table 10. Soil Features—Continued

Map symbol	l Rest	trictive layer		l Subs	idence	Potential for	Risk of corro	sion
and soil name	 Kind 	l Depth l to top	 Hardness 	l I Initial	l I Total	l frost l action	Uncoated steel	 Concrete
	l I	In. 	 	In. 	In. 	 	1	I I
117: Fairbanks	l Inone	 	 	 		l l High	l IModerate	l IModerate
118: Fairbanks	Inone					l High	I IModerate	 Moderate
119: Fairbanks	I Inone	 	 	 		l I High	l IModerate	l Moderate
120: Fairbanks	I I Inone	 	 	 		l l High	I I IModerate	l IModerate
121: Fairbanks, strongly sloping	 none 	 	 			 High 	l IModerate I	I I IModerate I
Fairbanks, steep	l Inone	 	 	 		l l High	l IModerate	I IModerate
122: Fairbanks	I Inone	!		ļ !		l l High	l IModerate	 Moderate
Steese	 Bedrock (paralithic) 	 20-40 	 Moderately cemented			I IModerate I	I IModerate I	I IModerate I
123: Fairbanks	I I Inone	 		 		l I High	I I IModerate	l IModerate
Steese	l lBedrock (paralithic) l	 20-40 	l IModerately I cemented	 		l IModerate I	l IModerate I	I IModerate I
124: Fubar	 none	 	 	 		l l l Low	l I IModerate	l I IModerate
Piledriver	l Inone	 	 	 	 	l l High	l IModerate	l IModerate
125: Gilmore	 Bedrock (paralithic) 	 13-24 	l I IModerately I cemented			l I IModerate I	l IModerate I	I I IModerate I
126: Gilmore	 Bedrock (paralithic) 	 13-24 	l I IModerately I cemented		 	 Moderate 	l IModerate I	 Moderate
127: Gilmore	 Bedrock (paralithic) 	 13-24 	l I IModerately I cemented		 	 Moderate 	l IModerate I	 Moderate
128: Gilmore	 Bedrock (paralithic) 	 13-24 	l I IModerately I cemented		 	 Moderate 	l IModerate I	 Moderate
129: Gilmore	 Bedrock (paralithic) 	 13-24 	l I IModerately I cemented		 	 Moderate 	l IModerate I	 Moderate
130: Gilmore	 Bedrock (paralithic) 	 13-24 	I I IModerately I cemented		 	 Moderate 	 Moderate 	 Moderate
131: Gilmore	 Bedrock (paralithic) 	 13-24 	I I IModerately I cemented			l I IModerate I	 Moderate 	 Moderate
Ester	l IPermafrost I	 7-30 	l IStrongly I cemented	 	 	l l High l	l l High l	l l High l
	lBedrock (paralithic)	14-39	Strongly cemented	i I		 	 	İ

Table 10. Soil Features—Continued

Map symbol	I Rest	rictive layer		l Subs	idence	Potential _I for	Risk of corre	osion
and soil name	 Kind	l Depth l to top	l Hardness	 Initial	l I Total	frost action	Uncoated steel	 Concrete
	i i	In.	 	In. 	In.	 	i I	i
132: Gilmore	l IBedrock (paralithic) I	 13-24 	I IModerately I cemented	 	 	 Moderate 	l IModerate I	 Moderate
Steese	l lBedrock (paralithic) l	 20-40 	I IModerately I cemented I	 		I IModerate I	I IModerate I	 Moderate
133: Goldstream	 Permafrost 	 14-24 	 Strongly cemented	 1-6 	 6-12 	l High I	l High I	l High I
134: Goldstream	 Permafrost 	 14-24 	IStrongly I cemented	 1-6 	 6-12 	l High	l High I	l High I
135: Goldstream	l IPermafrost	 14-24 	 Strongly cemented	 1-6 	 6-12 	l High	l High	l High
Histels	l IPermafrost I	 16-24 	I IStrongly I cemented	 8-18 	 16-35 	l l High l	l l High l	l l High l
136: Histels	 Permafrost 	 16-24 	 Strongly cemented	 8-18 	 16-35 	l High	l I High I	l High
137: Jarvis	Inone	 	 	 		 Moderate 	 Moderate	 Moderate
138: Jarvis	l Inone	i i	i I	i I	i i	i IModerate	l Moderate	i IModerate
Chena	l Inone					l Low	l IModerate	 Moderate
139: Jarvis	l Inone		 			l IModerate	 Moderate	 Moderate
Salchaket	l Inone	 	 		 	l Moderate	l Moderate	 Moderate
140: Lemeta	 Permafrost 	 15-24 	l Strongly cemented	 8-16	 16-32 	 High 	l l High	l I High I
141: Liscum	l I Inone	 	 	 1-6	 6-12	l l l High	 Moderate	l IModerate
Noonku	l Inone	i I	 		 	l I High	 Moderate	l IModerate
142: Minto	l Inone	 	 			 High	 High	l I High
143: Minto	I Inone	 	 	 		l High	l High	l I High I
144: Minto	l Inone I	 	 	 	 	 High 	l High	l I High I
145: Minto	l Inone	 	 	 	 	l l High	l l High	l l High
Chatanika	l IPermafrost I	 12-39 	I IStrongly I cemented			l l High l	l IModerate I	 Moderate
146: Minto	I Inone I		 	 		 High	 High 	l I High I
Chatanika	Permafrost 	12-39 	Strongly cemented	i !	i I	l High I	 Moderate 	 Moderate

Table 10. Soil Features—Continued

Map symbol		Restrictive layer		l Subsidence		Potential for	Risk of corro	sion
and soil name	 Kind	l Depth l to top	 Hardness 	 Initial 	l Total	frost action	Uncoated steel	 Concrete
		In. 		In. 	In. 			
147: Minto	 none		 		 	l l High	l l High	l l High
Chatanika	 Permafrost 	 12-39 	I IStrongly I cemented			l l High l	I IModerate I	I IModerate I
148: Minto	l Inone		 		 	l High	l High	l High
Chatanika	l IPermafrost I	 12-39 	l IStrongly I cemented	 	 	l l High l	l IModerate I	I IModerate I
149: Mosquito	 Permafrost 	 14-31 	I IStrongly I cemented	 1-6 	 10-12 	l l l High l	 Moderate 	 Moderate
150: Mosquito	 Permafrost 	 14-31 	l IStrongly I cemented	 1-6 	 10-12 	l High	I IModerate	 Moderate
Noonku	l Inone	 	 	 	 	l l High l	l IModerate	I IModerate
151: Noonku	Inone	ļ 	i 	i i	i 	l High	l IModerate	 Moderate
152: North Pole	Inone			 		l High	 Moderate	 Moderate
153: North Pole	I Inone		 			। । । High	l IModerate	I IModerate
Mosquito	l IPermafrost I	 14-31 	l IStrongly I cemented	 1-6 	 10-12 	l l High l	l IModerate I	I IModerate I
Liscum	l Inone I	 	 	 1-6 	 6-12 	l l High l	l IModerate I	I IModerate
154: North Pole	l Inone		 			l l High	l IModerate	l IModerate
Noonku	Inone			ļ		l High	 Moderate	Moderate
155: Peede	Inone		 			l High	l IModerate	 Moderate
156: Peede	l Inone		 	 		l High	l IModerate	 Moderate
Mosquito	l IPermafrost I	 14-31 	I IStrongly I cemented	l l 1-6 l	 10-12 	। High 	l Moderate I	I IModerate I
157: Piledriver	l Inone	 	 			l l l High	l IModerate	I I IModerate
158: Piledriver	l Inone		ļ 			l High	I IModerate	 Moderate
Eielson	Inone					l High	 Moderate	Moderate
159: Piledriver	l Inone		 			। । । High	l IModerate	l IModerate
Fubar	l Inone		 			l Low	l IModerate	 Moderate
160: Pits, gravel	l Inone		 					
161: Pits, quarry	I Inone		 			 		
162: Riverwash	l Inone	 	 		 	 		

Table 10. Soil Features—Continued

Map symbol	l Rest	trictive layer		l Subs	idence	l Potential	Risk of corro	osion
and soil name	 Kind 	Depth to top	 Hardness	 Initial	l I Total	l frost l action	Uncoated steel	 Concrete
	 	l In.	 	In.	l In.			
163: Salchaket	l Inone	 	 	 	 	l IModerate	l IModerate	l IModerate
164: Salchaket	l Inone		 	i !	i !	 Moderate	Moderate	 Moderate
Typic Cryorthents	Inone	ļ	ļ	ļ		I IModerate	 Moderate	 Moderate
165: Saulich	l Permafrost 	 14-24 	I IStrongly I cemented	 	 6-12 	l l High l	l I High I	l I I High I
166: Saulich	l IPermafrost I	 14-24 	I IStrongly I cemented	 4-8 	 6-12 	 High 	l High 	l High
167: Saulich	 Permafrost 	 14-24 	I Strongly I cemented	 4-8 	 6-12 	l I High I	l High I	l I High I
168: Saulich	 Permafrost 	 14-24 	 Strongly cemented	 4-8 	 6-12 	l High I	l High I	l High I
Minto	Inone	į	ļ	ļ	ļ	l High	l High	High
169: Saulich	l IPermafrost	 14-24 	 Strongly cemented	 4-8 	 6-12 	l l High	l l High	l High
Minto	Inone					l High	l High	l l High
170: Steese	 Bedrock (paralithic) 	 20-40 	I IModerately I cemented			I I IModerate I	I I IModerate I	I I IModerate I
171: Steese	 Bedrock (paralithic) 	 20-40	I IModerately I cemented			I IModerate I	I I IModerate I	I I IModerate I
172: Steese	 Bedrock (paralithic) 	 20-40 	I IModerately I cemented			I I IModerate I	I I IModerate I	I I IModerate I
173: Steese	 Bedrock (paralithic) 	 20-40 	I IModerately I cemented			I IModerate I	I IModerate I	I IModerate I
174: Steese	 Bedrock (paralithic) 	 20-40 	 Moderately cemented			 Moderate 	I IModerate I	 Moderate
175: Steese	l Bedrock (paralithic) 	 20-40 	 Moderately cemented			 Moderate 	I IModerate I	 Moderate
176: Steese	l Bedrock (paralithic) 	 20-40 	I IModerately I cemented	 		I IModerate I	I IModerate I	I IModerate I
Gilmore	l lBedrock (paralithic) l	 13-24 	 Moderately cemented 	 	 	I IModerate I	I IModerate I	I IModerate I
177: Steese	 Bedrock (paralithic) 	 20-40 	 Moderately cemented	 		 Moderate 	 Moderate 	l Moderate
Gilmore	l Bedrock (paralithic) I	 13-24 	 Moderately cemented	 	 	I IModerate I	I IModerate I	I IModerate I

Table 10. Soil Features—Continued

Map symbol	l Resi	trictive layer		l Subs	Subsidence		l Risk of corrosion	
and soil name	 Kind	l Depth	 Hardness	l Initial	l I Total	_l for l frost l action	Uncoated steel	 Concrete
		 In.	-	_	In.	- ' 		
178: Steese	l IBedrock (paralithic)	 20-40 	 Moderately cemented	 !	 	 Moderate 	I IModerate I	 Moderate
Gilmore	l Bedrock (paralithic) 	 13-24 	 Moderately cemented	 	ļ	l IModerate I	 Moderate 	 Moderate
179: Steese	l Bedrock (paralithic) 	 20-40 	I IModerately I cemented	 		 Moderate 	I I IModerate I	I I IModerate I
Gilmore	 Bedrock (paralithic) 	13-24 	 Moderately cemented			 Moderate 	 Moderate 	 Moderate
180: Tanacross	l IPermafrost I	 10-28 	 Strongly cemented	 1-8 	 8-16 	 High 	 High 	l High
181: Tanana	l IPermafrost I	 16-47 	l Strongly cemented	 	 	 High 	I I IModerate I	I IModerate I
182: Tanana	l IPermafrost I	 16-47 	I IStrongly I cemented	 	 	l l l High	l IModerate I	I I IModerate I
Mosquito	l Permafrost 	 14-31 	 Strongly cemented	 1-6 	 10-12 	l l High l	 Moderate 	 Moderate
183: Typic Cryaquents	 none		 			l I I High	l I IModerate	I IModerate
Histic Cryaquepts	Inone			2-3	3-6	High	l High	l High
Terric Cryofibrists	Inone	j		8-10	16-20	l High	Moderate	Moderate
184: Typic Cryorthents	Inone	; 	 	i 		l Moderate	 Moderate	 Moderate
185: Typic Cryorthents, fill	l I none	j 		į	ļ	 Moderate	 Moderate	 Moderate
Urban land	Inone		ļ	i	ļ		ļ	i
186: Urban land	I Inone		 					
187: Water	I Inone		 					
			_	_	_	_ [İ	_

Table 11. Land Capability

	 Land capability (non-irrigated)
101: Bolio	 7w
102: Bradway	
103: Chatanika	 6w
104: Chatanika	
105: Chatanika	 6w
106: Chatanika	 6w
107: Chatanika Goldstream	
108: Chena	 6s
109: Dumps, landfill	; ! —
110: Dumps, mine	—
111: Eielson	
112: EielsonPiledriver	
113: Eielson Tanana	
114: Ester	 7e
115: Ester	 7e
116: Fairbanks	
117: Fairbanks	 4e
118: Fairbanks	 6e
119: Fairbanks	 6e
120: Fairbanks	 7e

Table 11. Land Capability—Continued

	 Land capability (non-irrigated)
121: Fairbanks, strongly sloping Fairbanks, steep	 4e 7e
122: Fairbanks	
123: FairbanksSteese	 6e 6e
124: Fubar Piledriver	
125: Gilmore	 4s
126: Gilmore	 4e
127: Gilmore	 6e
128: Gilmore	 6e
129: Gilmore	 7e
130: Gilmore	 7e
131: Ester Gilmore	
132: Gilmore Steese	
133: Goldstream	 6w
134: Goldstream	 6w
135: Goldstream Histels	 6w 7w
136: Histels	
137: Jarvis	
138: Jarvis Chena	

Table 11. Land Capability—Continued

	l Land capability (non-irrigated)
139: Jarvis Salchaket	
140: Lemeta	 7w
141: Liscum Noonku	
142: Minto	 4s
143: Minto	 4s
144: Minto	 4e
145: Minto Chatanika	
146: Minto Chatanika	
147: Minto Chatanika	
148: Minto Chatanika	
149: Mosquito	 6w
150: Mosquito Noonku	
151: Noonku	 5w
152: North Pole	 5w
153: North Pole Mosquito Liscum	l 6w
154: North Pole Noonku	
155: Peede	İ

Table 11. Land Capability—Continued

	 Land capability
and 5011 Hame	l(non-irrigated)
156: Peede Mosquito	 5w 6w
157: Piledriver	 4s
158: PiledriverEielson	
159: Piledriver Fubar	
160: Pits, gravel	
161: Quarry pits	
162: Riverwash	 —
163: Salchaket	
164: Salchaket Typic Cryorthents	
165: Saulich	 6w
166: Saulich	 6w
167: Saulich	 6e
168: Minto Saulich	l 6w
169: Saulich Minto	 6e 6e
170: Steese	 3e
171: Steese	
172: Steese	
173: Steese	
174: Steese	 7e

Table 11. Land Capability—Continued

	Land capability (non-irrigated)
175: Steese	 7e
176: SteeseGilmore	 6e 6e
177: SteeseGilmore	 6e 6e
178:	
179:	
180: Tanacross	 6w
181: Tanana	 5w
182: Tanana Mosquito	 5w 6w
183: Typic Cryaquents Histic Cryaquepts Terric Cryofibrists	 6w 6w 7w
184: I Typic Cryorthents	
185: Typic Cryorthents, fillUrban land	 3s —
 186:	_
 187:	

Table 12. Forest Productivity

(Absence of an entry indicates that the data were not estimated.)

	Potential produc	tivity		
Map symbol and soil name	Common trees	l Site I index	of wood	Trees to manage
	I	! 	Cu. Ft./Acre	
01: Bolio	l lblack spruce	i 	 —-	
02: Bradway		<u>i</u> —	<u> </u>	
03: Chatanika	 black enruge	i I 42		
orialariika	lwhite spruce	67		
04: Chatanika	lblack spruce	i I 42	 	
	white spruce	67 	29	i I
05: Chatanika	lblack spruce	i I 42	 	i I—-
- Talai ma	lwhite spruce	i 67	29	i
06: Chatanika	 lblack spruce	i i—	<u> </u>	i
	lwhite spruce	67 	29	i I
07: Chatanika	lblack spruce	i I 42	 	i
Traca inc	lwhite spruce	67	29	i
Goldstream	lblack spruce	i		<u> </u>
08: Chena	 balsam poplar white spruce	 80	 —- 29	I Iwhite spruce
09: Dumps, landfill	 	 	 	
10: Dumps, mine	 	 	 	
11:		 		
Eielson	lbalsam poplar white spruce	90	43	lwhite spruce
12: Eielson		 	 —-	l lwhite spruce
Dila daire a	lwhite spruce	90 	l 43	
Piledriver	white spruce	—-	14	lwhite spruce
13:	 haleam poplar	 		 white spruce
Eielson	lbalsam poplar white spruce	—- 90 	43	lwhite spruce
anana	lblack spruce white spruce	22 55	 14	
14: Ester	 	 	<u></u>	
15: Ester	 	 	 —-	
16:			 	
-airbanks	lwhite spruce lpaper birch lquaking aspen	83 60 65	29 43 57	lwhite spruce I I

Table 12. Forest Productivity—Continued

	l Potential produc	tivity		
Map symbol and soil name	Common trees	 Site index 	of wood	Trees to manage
		-¦	Cu. Ft./Acre	-
117: Fairbanks	l lwhite spruce Ipaper birch Iquaking aspen	 83 60 65	l 43	 white spruce
118:		 	 	1
Fairbanks	lwhite spruce Ipaper birch Iquaking aspen I	83 60 65 	l 43	white spruce
19: Fairbanks	l lwhite spruce Ipaper birch Iquaking aspen	 83 60 65	l 43	 white spruce
20: Fairbanks	l lwhite spruce Ipaper birch Iquaking aspen	 83 60 65		I Iwhite spruce I
21: Fairbanks, strongly sloping	lpaper birch	 83 60	l 43	l white spruce
Fairbanks, steep	lquaking aspen lwhite spruce paper birch	65 83 60	l l 29	 white spruce
22.	lquaking aspen I	65 	57 	
22: Fairbanks	l lwhite spruce Ipaper birch Iquaking aspen	 83 60 65	l 43	lwhite spruce l
Steese	l paper birch quaking aspen white spruce black spruce	 65 70 72 40	72 29	I Iwhite spruce I I
23:	 			
Fairbanks	lpaper birch Iquaking aspen Iwhite spruce	60 65 83	l 57	lwhite spruce
Steese	I lpaper birch Iquaking aspen Iwhite spruce	 65 70 85 	43 72 29	lwhite spruce
24: =ubar	 lhalsam nonlar	i i—		l lpaper birch, white
, dod	lpaper birch Iquaking aspen Iwhite spruce	—- —- 79	—- —- 29	spruce
Piledriver	 balsam poplar white spruce	 74		l lwhite spruce l
25: Gilmore	 black spruce paper birch quaking aspen white spruce	44 68	—- 14 29 29	 white spruce
26: Gilmore	l I Ipaper birch Iquaking aspen Iwhite spruce	30 38 44 68		 white spruce

Table 12. Forest Productivity—Continued

	Potential productiv	ity		I
Map symbol and soil name	Common trees	 Site index	l of wood	Trees to manage
	! !	<u> </u>	Cu. Ft./Acre	
127: Gilmore	lpaper birch	 30 38 44	l 14	I I Iwhite spruce I
		i 68		
128: Gilmore	lpaper birch lquaking aspen	•	l 14 l 29	l lwhite spruce l
129: Gilmore	l I Iblack spruce Ipaper birch	 30 38	l 14	
		44 68 		
130: Gilmore	lpaper birch	 30 38 44 68	l 14 l 29	white spruce
131:	I .	l l	 	i I
Gilmore	lpaper birch lquaking aspen	30 38 44 68	l 14 l 29	lwhite spruce I I
Ester	 	<u> </u>	 —-	<u> </u>
132:	1		 	
Gilmore	lpaper birch lquaking aspen	30 38 44 68	l 14 l 29	lwhite spruce
Steese	lquaking aspen lwhite spruce	65 70 72 40	43 72 29	lwhite spruce
133: Goldstream	 black spruce	<u> </u>	 —-	
134: Goldstream	l lblack spruce	<u> </u>	 —-	
135: Goldstream	l black spruce	 	 —-	
Histels	l lblack spruce	<u> </u>	 —-	
136: Histels	l black spruce	 	 	
137: Jarvis	l paper birch quaking aspen white spruce	 50 60 80	 	 white spruce

Table 12. Forest Productivity—Continued

	l Potential produc	ctivity		
Map symbol and soil name	Common trees	 Site index		Trees to manage
	<u> </u>		Cu. Ft./Acre	<u> </u>
138:	 		 	
Jarvis	lpaper birch Iquaking aspen Iwhite spruce	1 80	29 57 29	lwhite spruce
Chena	lbalsam poplar white spruce	 80	 —- 29	lwhite spruce
39:	<u> </u>			į.,,
Jarvis	lquaking aspen lwhite spruce	50 60 80		lwhite spruce
Salchaket	white spruce balsam poplar	94	 43 —-	lwhite spruce
40: Lemeta	 black spruce	i 	 —- 	
41: Liscum	 block compos	į	 	1
Liscum	Iblack spruce Itamarack 	 	—- —- 	
Noonku		—- 	i —-	
42: Minto	 lwhite spruce 	 83 	 29 	l lwhite spruce l
43: Minto	l lwhite spruce	 83 	 29	l
44: Minto	white spruce	 83	 29	lwhite spruce
45: Minto	 white spruce	 83	 29	 white spruce
Chatanika	l lblack spruce lwhite spruce	 42 67	 —- 29	
46: Minto	 		 	
	l '	83 	l 29 I	lwhite spruce
Chatanika	lblack spruce lwhite spruce	42 67 	l —- l 29 l	
147: Minto	Ì	i 83	 29	l lwhite spruce
Chatanika	l lblack spruce lwhite spruce	 42 67	 —- 29	
48: Minto	 lwhite spruce	 67	 29	 white spruce
Chatanika	l lblack spruce lwhite spruce	 67	 29	
49:			 - 	i I
Mosquito	lblack spruce Itamarack		 	
50: Mosquito	l lblack spruce	 	 —-	
·	Itamarack I	— 		
Noonku	 	—- 	 	

Table 12. Forest Productivity—Continued

	Potential p	 		
Map symbol and soil name	Common trees	 Site index 	of wood	Trees to manage
	! 	''	Cu. Ft./Acre	
151: Noonku	 	 	 —- 	
152: North Pole	l Itamarack Iblack spruce	 37 	 	
153: North Pole			 	
Mosquito	lblack spruce Itamarack		 	
Liscum	lblack spruce Itamarack	 	 	
154: North Pole	I I Iblack spruce Itamarack		 —- —-	
Noonku	 	 	 	
155: Peede		i i 		
156: Peede	 	! !	_	
Mosquito	lblack spruce Itamarack	 	 	
157: Piledriver		 74	 14	I white spruce
158: Piledriver		 74	 14	lwhite spruce
Eielson		 90	—- 43	lwhite spruce
	lwhite spruce	 		l white spruce
Fubar	lbalsam poplar lpaper birch lquaking aspen		 29	lpaper birch, white I spruce
160: Pits, gravel	I I		 —-	
161: Quarry pits	 	i 		
162: Riverwash	 	 	<u> </u>	
163: Salchaket	 white spruce balsam poplar 		 43 —	 white spruce

Table 12. Forest Productivity—Continued

	Potential producti			
Map symbol and soil name	Common trees	 Site index		 Trees to manage
		- <u> </u>	ICu. Ft./Acre	-
164: Salchaket	l lwhite spruce lbalsam poplar	 94 —-	 	l lwhite spruce l
Typic Cryorthents	 	i	 —-	
165: Saulich	l lblack spruce	<u> </u>	 	
166: Saulich	l Iblack spruce	ļ 	 	
167: Saulich	 	<u> </u>	 —-	
168: Saulich	 	ļ	 —-	
Minto	lwhite spruce	l l 67	l l 29	lwhite spruce
169: Saulich	 	<u> </u>	 —-	
Minto		67	l 29	lwhite spruce
170: Steese	l paper birch lquaking aspen lwhite spruce lblack spruce	 65 70 72 40	 43 72 29 	 white spruce
171: Steese	lpaper birch lquaking aspen lwhite spruce black spruce	 65 70 72 40	 43 72 29 —-	 white spruce
172: Steese	lpaper birch lquaking aspen lwhite spruce lblack spruce	 65 70 72 40	 43 72 29 —-	 white spruce
173: Steese	lpaper birch lquaking aspen lwhite spruce lblack spruce	 65 70 72 40	 43 72 29 —-	 white spruce
174: Steese	l paper birch lquaking aspen lwhite spruce lblack spruce	 65 70 72 40	 43 72 29 —-	 white spruce
175: Steese	I paper birch lquaking aspen lwhite spruce lblack spruce	 65 70 72 40	 43 72 29 —-	 white spruce

Table 12. Forest Productivity—Continued

	l Potential produc			
Map symbol and soil name	Common trees	Site I ndex	Volume of wood	Trees to manage
	l 		Cu. Ft./Acre	_
176: Steese	l - lpaper birch		43	 white spruce
	lquaking aspen lwhite spruce	70 85	29	
Gilmore		 38		lwhite spruce
	lpaper birch lquaking aspen lwhite spruce	44	29	
177: Steese	 - lpaper birch			l lwhite spruce
	lquaking aspen lwhite spruce l		72	
177: Gilmore	 - black spruce			l I Iwhite spruce
	lpaper birch lquaking aspen lwhite spruce	38 44 68		
178: Steese	l - lpaper birch		43	 white spruce
0.0000	lquaking aspen lwhite spruce	70 85	72 29	
Gilmore	l - Iblack spruce Ipaper birch Iquaking aspen Iwhite spruce	38 44	14 29 29	I Iwhite spruce I I
179:				i I
Steese	- Ipaper birch Iquaking aspen Iwhite spruce	65 70 85 	72 29	lwhite spruce
Gilmore	- lblack spruce Ipaper birch Iquaking aspen Iwhite spruce	i i	 14 29	lwhite spruce
180: Tanacross	 - black spruce			
181: Tanana	l - - Iblack spruce lwhite spruce		 14	
182: Tanana	 - Iblack spruce	 22		
	lwhite spruce	55 	14	
Mosquito	- Iblack spruce Itamarack	 		
183: Typic Cryaquents	i -	<u> </u>		
Histic Cryaquepts	 - 	<u> </u>		<u> </u>
Terric Cryofibrists	- 			
184: Typic Cryorthents	 -	 		;

Table 12. Forest Productivity—Continued

	l Potential produc	Potential productivity			
Map symbol and soil name	Common trees	lindex l of	lume Trees t wood iber	o manage	
		Cu. F	t./Acre		
185:		i i	i		
Typic Cryorthents, fill			·		
Urban land		<u> </u>	-		
186:					
Urban land		! !	·		
187: Water	 		 - 		

Table 13. Forestland Management: Erosion Hazard, Road Limitations

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

features	.00 .00 .00 .00
features	.00 .00 .00
g 11.	.00 .00 .00
g 11. ng 11. ss 11. rength 10.	.00 .00
ss 11.	
rength 0	.00 0.50 0.50
g 10.	.00 0.50 0.50
ss 1. g 0.	.00 0.50 0.50 0.50
11. ss	.00 .00 0.50
ss 11.	.00).50).50
ited: g 1	.00
ed	
d	
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t i sit i t	ng 0 10 10 10 10 10 10 10

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	l map	off-road or off-trail	l on ro	ard of erosion lads and trails	l on n	atural surface	
	UIIII 	(Standard criteria)	(Stai Value	ndard criteria) I Rating class and I limiting features		ska criteria) I Rating class and I limiting features	Value
	<u> </u>		<u></u>		<u>i</u>		
111: Eielson	 80 	l Slight 		 Slight 		 	1 1 11.00 10.50 10.50
112: Eielson	 60 	 Slight 		 Slight 	 	 Very limited: Flooding Ponding Low Strength	 1.00 0.50 0.50
Piledriver	 30 	l ISlight I I	 	 Slight 		 Somewhat limited: Ponding Low Strength	 0.50 0.50
113: Eielson	 50 	l Slight 		 Slight 	 	 Very limited: Flooding Ponding Low Strength	 1.00 0.50 0.50
Tanana	 35 	l Slight 	 	 Slight 	 	 Very limited: Wetness Ponding Low Strength	 1.00 0.50 0.50
114: Ester	 70 	 Severe: Slope/erodibility Slope/erodibility 	 0.75 0.50		l 0.95 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
115: Ester	 75 	 Very severe: Slope/erodibility Slope/erodibility 	 0.95 0.75	 Severe: Slope/erodibility Slope/erodibility	 0.95 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
116: Fairbanks	 80 	 Slight 	 	 Moderate: Slope/erodibility 	 0.50 	 Somewhat limited: Low Strength	 0.50
117: Fairbanks	 80 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Somewhat limited: Slope Low Strength	 0.50 0.50
118: Fairbanks		 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
119: Fairbanks	 80 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
120: Fairbanks	 85 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	 IVery limited: Slope Low Strength	 1.00 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	l map	off-road or off-trail	l on ro	ard of erosion ads and trails adard criteria)	l on n	ations for roads atural surface ska criteria)	
	 	I I Rating class and I limiting features	Value	Rating class and limiting features	 Value 	Rating class and I limiting features	Value
121: Fairbanks, strongly sloping	 60 	 	 	 Severe:		 Somewhat limited:	
		Slope/erodibility	10.50 I	Slope/erodibility	0.95 	Slope Low Strength	10.50 10.50
Fairbanks, steep	 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
122: Fairbanks	 	 Moderate: Slope/erodibility 	 0.50 		 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
Steese	30 	Moderate: Slope/erodibility	 0.50 		 0.95 	IVery limited: Slope Low Strength	 1.00 0.50
123: Fairbanks	 	 IModerate: Slope/erodibility 	 0.50	 Severe: Slope/erodibility	 0.95 	 IVery limited: Slope Low Strength	 1.00 0.50
Steese	 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
124: Fubar	i l 50 !	I ISlight I		l Slight 		 Somewhat limited: Low Strength	 0.50
Piledriver	 	l ISlight I		I ISlight I			1 10.50 10.50
125: Gilmore	 	I Slight 		 Moderate: Slope/erodibility	 0.50 	 Somewhat limited: Low Strength	 0.50
126: Gilmore	 70 	 Moderate: Slope/erodibility 	 0.50 	I IModerate: I Slope/erodibility	 0.50 		 0.50 0.50
127: Gilmore	 	 Moderate: Slope/erodibility 	 0.50	 Severe: Slope/erodibility	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
128: Gilmore	 	 Moderate: Slope/erodibility	 0.50 		 0.95 		 1.00 0.50
129: Gilmore	 	 Severe: Slope/erodibility 	 0.75		 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
130: Gilmore	 	 	 0.95	 Severe: Slope/erodibility 	 0.95	 IVery limited: Slope Low Strength	 1.00 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	l map	l off-road or off-trail	l on ro	ard of erosion eads and trails	l on n	atural surface	
		(Standard criteria)	(Star Value	Rating class and		Rating class and	IValue
	_	l limiting features		l limiting features		limiting features	_
131: Gilmore	 	 Moderate: Slope/erodibility 	 0.50	 Severe: Slope/erodibility 	 0.95 	 IVery limited: Slope Low Strength	 1.00 0.50
Ester	40 		1 10.75 10.75	Severe: Slope/erodibility Slope/erodibility	1 10.95 10.95 1		1 11.00 10.50
132: Gilmore	 65 	 Slight 		 Moderate: Slope/erodibility 	 0.50 	 Somewhat limited: Slope Low Strength	 0.50 0.50
Steese	 33 	 Slight - 		 Moderate: Slope/erodibility 	 0.50 		I I I0.50 I0.50
133: Goldstream	 80 	 Slight 		l ISlight I		 Very limited: Ponding Low Strength	 1.00 0.50
134: Goldstream	i 80 	 Slight 	 	 IModerate: Slope/erodibility 	i I I0.50 I	 Very limited: Ponding Low Strength	 1.00 0.50
135: Goldstream	 50 	I ISlight I		I ISlight I	i ! !	I IVery limited: I Ponding I Low Strength	 1.00 0.50
Histels	45 	l Slight 		I Slight 	 	I IVery limited: I Ponding	 1.00
136: Histels	 90 	l Slight 		l ISlight I	 	I IVery limited: I Ponding	 1.00
137: Jarvis	 75 	l Slight 		l ISlight I	 	 Somewhat limited: Low Strength	 0.50
138: Jarvis	 55 	l Slight 		I ISlight I	 	 Somewhat limited: Low Strength	 0.50
Chena	35	 Slight 	i	 Slight	į	Not limited	į
139: Jarvis	 45 	I ISlight I		l ISlight I		 Somewhat limited: Low Strength	 0.50
Salchaket	45 	I Slight 	 	 Slight 	 	 Very limited: Wetness Ponding Low Strength	1 11.00 10.50 10.50
140: Lemeta	 75 	I ISlight I		I ISlight I	 	I IVery limited: I Ponding	 1.00

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct.	off-road or off-trail		ard of erosion ads and trails		ations for roads atural surface	
	l map l unit	 (Standard criteria)	l (Star	ndard criteria)	l (Ala:	ska criteria)	
	; ; ;	Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141: Liscum	 	 Slight 	 	I I ISlight I I		 Very limited: Ponding Wetness Low Strength	 1.00 1.00 0.50
Noonku	45 	 Slight 		 Slight 			 1.00 1.00 1.00 0.50
142: Minto	 80 	 Slight 	 	I ISlight I I		 IVery limited: Wetness Low Strength	 1.00 0.50
143: Minto	 70 	 Slight 	 	 Moderate: Slope/erodibility 	 0.50 	I IVery limited: I Wetness I Low Strength	 1.00 0.50
144: Minto	60 	 Slight 		 Severe: Slope/erodibility 	 0.95 		1 11.00 10.50 10.50
145: Minto	 45 	l Slight 		l Slight 	 	 IVery limited: Wetness Low Strength	 1.00 0.50
Chatanika	 40 	 Slight 	 	 Slight 		 Very limited: Wetness Ponding Low Strength	1 11.00 10.50 10.50
146: Minto	 40 	 Slight 	 	 IModerate: Slope/erodibility 	 0.50 	I Very limited: I Wetness I Low Strength	 1.00 0.50
Chatanika		Slight 		Moderate: Slope/erodibility 	 0.50 	IVery limited: I Wetness I Ponding I Low Strength	11.00 10.50 10.50
147: Minto	 45 	 Slight 		 Severe: Slope/erodibility 	 0.95 		11.00 10.50 10.50
Chatanika		Slight 		 Severe: Slope/erodibility 	 0.95 	IVery limited: I Wetness I Ponding I Slope I Low Strength	 1.00 0.50 0.50 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. I of I map	off-road or off-trail		ard of erosion eads and trails		tions for roads atural surface	
		(Standard criteria)	l (Star	ndard criteria)	l (Alas	ska criteria)	
	į	Rating class and limiting features	Value	Rating class and I limiting features	Value	Rating class and I limiting features	Value
148: Minto	45 	I IModerate: Slope/erodibility 	 0.50 	 	 0.95 		 1.00 1.00 0.50
Chatanika	 40 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	IVery limited: Wetness Slope Ponding Low Strength	 1.00 0.50 0.50 0.50
149: Mosquito	85 	 Slight 		I ISlight I	i ! !		 1.00 0.50
150: Mosquito	 45 	I Slight 		l Slight 	 	 IVery limited: Ponding Low Strength	1 1 11.00 10.50
Noonku	 40 	I ISlight I I I	 	I ISlight I I I		IVery limited: Ponding Flooding Wetness Low Strength	 1.00 1.00 1.00 0.50
151: Noonku	 80 	I ISlight I I I	 	ISlight ISlight I		 Very limited: Ponding Flooding Wetness Low Strength	 1.00 1.00 1.00 0.50
152: North Pole	 85 	I ISlight I		l ISlight I	 	 Very limited: Ponding Wetness	 1.00 1.00
153: North Pole	50 	 Slight 	 	l Slight 	i ! !	 Very limited: Ponding Wetness	 1.00 1.00
Mosquito	30 	I ISlight I		 Slight 	 	 Very limited: Ponding Low Strength	1 1 11.00 10.50
Liscum	 20 	 Slight 	 	I ISlight I I	 	 Very limited: Ponding Wetness Low Strength	1 1.00 1.00 0.50
154: North Pole	 55 	 Slight 		l ISlight I	 	 Very limited: Ponding Wetness	 1.00 1.00
Noonku	 25 	 Slight 	 	 Slight 		 Very limited: Ponding Flooding Wetness Low Strength	 1.00 1.00 1.00 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map	off-road or off-trail		ard of erosion ads and trails		tions for roads atural surface	
	l unit	(Standard criteria)	l (Star	ndard criteria)	l (Alas	ska criteria)	
	 	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
155: Peede	 . 85 	 Slight 	 	l I ISlight		 Very limited: Ponding	 1.00
	 	 	 	 	 	Flooding Wetness Low Strength	1.00 1.00 0.50
156: Peede	 . 70 	 Slight 	 	 Slight 	 	IVery limited: Ponding Flooding Wetness Low Strength	 1.00 1.00 1.00 0.50
Mosquito	 . 25 	 Slight 	 	 Slight 	 	 Very limited: Ponding Low Strength	 1.00 0.50
157: Piledriver	 . 75 	 Slight 	 	I ISlight I I	 	 Somewhat limited: Ponding Low Strength	 0.50 0.50
158: Piledriver	 50 	 Slight 	; ! !	l Slight 	 	 Somewhat limited: Ponding Low Strength	 0.50 0.50
Eielson	 . 35 	 Slight 	 	 Slight 	 	 Very limited: Flooding Ponding Low Strength	 1.00 0.50 0.50
159: Piledriver	 50 	 Slight 		 Slight 	 	 Somewhat limited: Ponding Low Strength	1 10.50 10.50
Fubar	 . 40 	l Slight 	 	I Slight 			 0.50
160: Pits, gravel	 .l100 	 Not rated 		 Not rated 		 Not rated 	
161: Pits, quarry	 . 100 	 Not rated 	 	 Not rated 	 	 Not rated 	
162: Riverwash	 . 100	I I INot rated	 	 Not rated 	 	I I INot rated	
163: Salchaket	 85 	 Slight 	 	 Slight 	 	 IVery limited: Wetness Ponding Low Strength	 1.00 0.50 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map	off-road or off-trail		ard of erosion ads and trails		tions for roads atural surface	
		 (Standard criteria)	l (Stan	dard criteria)	l (Alas	ska criteria)	
		Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
164: Salchaket	 45 	 Slight 	 	 Slight 	 	 Very limited: Wetness Ponding Low Strength	 1.00 0.50 0.50
Typic Cryorthents	 40 	। Slight 		I ISlight I	 	I Not limited	
165: Saulich	 80 	 Slight 	 	 Moderate: Slope/erodibility 	 0.50 	 Very limited: Low Strength Ponding	 1.00 0.50
166: Saulich	 80 	 Moderate: Slope/erodibility 	 0.50 	 ISevere: Slope/erodibility 	 0.95 		1 1 11.00 10.50 10.50
167: Saulich	 75 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 		 1.00 1.00 0.50
168: Saulich	 40 	 Slight 	 	 IModerate: Slope/erodibility 	 0.50 	 IVery limited: Low Strength Ponding Slope	1 11.00 10.50 10.50
Minto	 40 	 Slight 		 Severe: Slope/erodibility 	 0.95 	IVery limited: Wetness Low Strength Slope	 1.00 0.50 0.50
169: Saulich	 40 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 IVery limited: Low Strength Slope Ponding	 1.00 1.00 0.50
Minto	 35 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	IVery limited: Slope Wetness Low Strength	 1.00 1.00 0.50
170: Steese	 80 	 Slight 		 Moderate: Slope/erodibility	 0.50	 Somewhat limited: Low Strength	 0.50
171: Steese	 80 	 Moderate: Slope/erodibility	 0.50 		 0.95 		1 10.50 10.50
172: Steese	 70 	I Moderate: Slope/erodibility 	 0.50	 Severe: Slope/erodibility	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
173: Steese	 75 	 Moderate: Slope/erodibility 	 0.50	 Severe: Slope/erodibility	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map	off-road or off-trail		ard of erosion ads and trails		itions for roads atural surface	
	l unit	(Standard criteria)	l (Star	ndard criteria)	l (Alas	ska criteria)	
	i	Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	lValue I
174:	i	 	i	 	İ	<u> </u> 	i I
Steese	85 	Severe: Slope/erodibility 	 0.75 	Slope/erodibility	 0.95 	Very limited: Slope Low Strength	l l1.00 l0.50
175:		 			İ	 	
Steese	90 	Very severe: Slope/erodibility 	 0.95 	Severe: Slope/erodibility 	 0.95 	Very limited: Slope Low Strength	1 11.00 10.50
176:	į				į		-
Steese	55 	Moderate: Slope/erodibility 	 0.50 	Slope/erodibility	 0.95 	Very limited: Slope Low Strength	1 1.00 0.50
Gilmore	25 	 Moderate: Slope/erodibility 	 0.50 		 0.50 		1 11.00 10.50
177: Steese	i l 50 I	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 		 1.00 0.50
Gilmore	 40 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 		 1.00 0.50
178:	l I	 	l I	 	l I	1	l I
Steese		Severe: Slope/erodibility 	 0.75 	Severe: Slope/erodibility 	l 10.95 I	IVery limited: I Slope I Low Strength	l l1.00 l0.50
Gilmore	 40 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
179: Steese	 45 	 Very severe: Slope/erodibility	 0.95 	 Severe: Slope/erodibility	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
Gilmore	45 	l IVery severe: I Slope/erodibility I	 0.95	 Severe: Slope/erodibility 	 0.95 		1 11.00 10.50
180:		 					
Tanacross	90 	Slight 	 	ISlight I I		ISomewhat limited: Ponding Low Strength	1 10.50 10.50
181: Tanana	 75 	 Slight 	 	 Slight 		 Very limited: Wetness Ponding Low Strength	1 11.00 10.50 10.50
182: Tanana	60 	 Slight 		 Slight 	 	 IVery limited: Wetness Ponding Low Strength	I I I1.00 I0.50 I0.50
Mosquito	 20 	l Slight 		l ISlight I	 	IVery limited: Ponding Low Strength	 1.00 0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Map symbol Pct. and soil name of map		Hazard of erosion on roads and trails		Limitations for roads on natural surface		
	l map l unit	 (Standard criteria) 	(Standard criteria)		(Alaska criteria)		
	 	Rating class and limiting features 	Value I 	Rating class and limiting features	Value Value 	Rating class and I limiting features	Value
183: Typic Cryaquents	 30 	 Slight 	 	l Slight 		l Very limited: Ponding Flooding Low Strength	 1.00 1.00 0.50
Histic Cryaquepts	 25 	l Slight 		I ISlight I			1 1 11.00 10.50
Terric Cryofibrists	 20 	I IVery Severe I High organic content I	 1.00 	 Very Severe High organic content 	11.00		1 11.00 10.50
184: Typic Cryorthents	 80 	 Slight 		l Slight 		 Somewhat limited: Low Strength	 0.50
185: Typic Cryorthents, fill	l l 45	l Slight	į	l Slight	į	I Not limited	į
Urban land	 45 	। lNot rated ।		 Not rated 		Not rated	
186: Urban land	 100 	 Not rated 	 	I I INot rated I	 	 Not rated 	
187: Water	 100 	l Not rated 	 	I INot rated I		I INot rated	

Table 14. Building Site Development: Structures

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map	Dwellings without basements		Dwellings with basements		commercial puildings	
	unit	(Standard criteria)	i (S	standard criteria)	l (Sta	andard criteria)	
	 	Rating class and I limiting features	Value	Rating class and I limiting features	Value	Rating class and I limiting features	Value
101: Bolio	 	I IVery limited Depth to Depth to Permafrost Ponding Subsidence Flooding Depth to saturated zone	 11.00 11.00 11.00 11.00 11.00	I IVery limited I Depth to Permafrost Ponding Subsidence Flooding Depth to saturated zone	1.00 1.00 1.00 1.00		 11.00 11.00 11.00 11.00 11.00
102: Bradway	 	I IVery limited Ponding Flooding Depth to saturated zone Depth to permafrost	 11.00 11.00 11.00 10.80	I IVery limited I Ponding Flooding Depth to saturated zone Depth to permafrost I I I I I I I I I	11.00		 11.00 11.00 1.00 0.80
103: Chatanika	 	IVery limited I Ponding I Depth to I saturated zone I Depth to I permafrost	 1.00 1.00 0.99	 Very limited Ponding Depth to saturated zone Depth to permafrost		 Very limited Ponding Depth to saturated zone Depth to permafrost	 11.00 11.00 10.99
104: Chatanika	 	IVery limited Ponding Depth to saturated zone Depth to permafrost IVertical	11.00 11.00 10.99				1 11.00 11.00 10.99 1 10.12
105: Chatanika	 	IVery limited Ponding Depth to saturated zone Depth to permafrost Slope I	11.00 11.00 1 10.99 1 10.16	IVery limited Ponding Depth to saturated zone Depth to permafrost Slope I I I I I I I I I			1 11.00 11.00 1 11.00 1 10.99
106: Chatanika	 	I Very limited I Ponding Depth to saturated zone Slope I Depth to permafrost	11.00 11.00 11.00 11.00 10.99	IVery limited Ponding Depth to Saturated zone Slope I Depth to permafrost		 Very limited Slope Ponding Depth to saturated zone Depth to permafrost	 11.00 11.00 11.00 10.99

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of	Dwellings without basements		Dwellings with basements		l commercial buildings	
	l map l unit	l (Standard criteria)	 (S	standard criteria)	l (Sta	andard criteria)	
		Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
107:	- <u>'</u>	 	 	I	' 	 	
Chatanika	55 	Very limited Ponding Depth to saturated zone Depth to	 1.00 1.00 0.99	Very limited Ponding Depth to saturated zone Depth to	11.00 11.00 10.99	Very limited Ponding Depth to saturated zone Depth to	 1.00 1.00 0.99
Goldstream	 25	l permafrost l IVery limited		l permafrost l IVery limited		l permafrost l IVery limited	
Goldsilean	 	Depth to permafrost Ponding Depth to saturated zone	1.00 1.00 1.00	Depth to permafrost Ponding Depth to saturated zone	1.00 1.00 1.00	Depth to Ponding Popth to Ponding Depth to saturated zone	1.00 1.00 1.00
108:				1	i	 	l
Chena	90 	IVery limited I Flooding I	 1.00 	Very limited Flooding 	 1.00 	Very limited Flooding 	 1.00
109: Dumps, landfill	 100 	I INot rated I	 	I INot rated I	 	 Not rated 	
110: Dumps, mine	100	I Not rated		I INot rated		l INot rated	
111: Eielson	 80 	 Very limited Ponding Flooding Depth to saturated zone	 	IVery limited Ponding Flooding Depth to saturated zone	 	IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
112:			į	None limited	į	 	į
Eielson	 	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Piledriver	30 	Very limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
113: Eielson	 50 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited	 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Tanana	 	IVery limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86	IVery limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86		 1.00 1.00 1.00 0.86

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements		Dwellings with basements		commercial puildings	
	l unit	l (Standard criteria)	 	Standard criteria)	l (Sta	andard criteria)	
	 	Rating class and limiting features	Value	Rating class and limiting features		Rating class and I limiting features	IValue I
114:	 	i I	 	i I	i I		
Ester	70	IVery limited I Depth to	l l1.00	IVery limited I Depth to	l l1.00	Very limited Depth to	 1.00
	i	permafrost		permafrost	11.00	permafrost	
	I	Slope Depth to	1.00 1.00	Slope	1.00 1.00	Slope Depth to	1.00 1.00
	i	saturated zone	11.00	Depth to saturated zone	11.00	saturated zone	11.00
	 	Content of organic matter	1.00 	Depth to soft bedrock	10.99 I	Content of organic matter	1.00
115:	1		1	1	l I	 	1
Ester	İ 75	Very limited	i	Very limited		lVery limited	i
		Depth to permafrost	11.00	Depth to permafrost	11.00	Depth to permafrost	11.00
	i	Slope	11.00	Slope	11.00	Slope	11.00
	!	Depth to	1.00	Depth to	11.00	Depth to	11.00
	l	Saturated zone Content of	l l1.00	Saturated zone Depth to soft		Saturated zone Content of	l 1.00
	į	l organic matter		bedrock		organic matter	
116: Fairbanks		l Not limited		 Not limited	į	 Somewhat limited	į
rairbanks	1 80	 		 	į	Slope	0.12
117:						I 	į
Fairbanks	80	Somewhat limited Slope	l 0.16	Somewhat limited Slope	l 0.16	Very limited Slope	11.00
118:						 	
Fairbanks	l 70 l	IVery limited I Slope	l l1.00	Very limited Slope	l l1.00	Very limited Slope	l l1.00
119:	 	1	 		l I	 	
Fairbanks	80	IVery limited I Slope	l l1.00	Very limited Slope	l l1.00	Very limited Slope	 1.00
120:	į	l		l			
Fairbanks	85	Very limited		Very limited		। IVery limited	i
	 	Slope 	1.00 	Slope	1.00 	Slope 	1.00
121: Fairbanks, strongly	l l 60	l ISomewhat limited		 Somewhat limited	l I	 Very limited	
sloping	 	l Slope	10.16 I	I Slope	l0.16 l	Slope 	1.00
Fairbanks, steep	l 30	IVery limited I Slope	l l1.00	IVery limited I Slope	l l1.00	IVery limited I Slope	 1.00
122:	İ	1		1	İ	 	İ
Fairbanks	55	Very limited		 Very limited		 Very limited	
_		I Slope	1.00 	Slope	1.00 	l Slope	1.00
Steese	30	IVery limited I Slope	l l1.00	Very limited Slope	l l1.00	Very limited Slope	l l1.00
	į	Giope		Depth to soft	10.20	 	
100	-		-	bedrock	-		
123: Fairbanks	I I 40	l IVery limited	I	 Very limited	I	 Very limited	I
, andamo		Slope	1.00	Slope	11.00	Slope	11.00
Steese	30	Very limited		Very limited		Very limited	
	I	l Slope	1.00 	Slope Depth to soft	1.00 0.20	l Slope	1.00
	- 1	:		bedrock	10.20		:

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of	Dwellings without basements	 	Dwellings with basements		commercial ouildings	
	l map l unit	l (Standard criteria)	 (S	Standard criteria)	l (Sta	andard criteria)	
	; !	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and I limiting features	Value
124:	i	1	İ	 	i	 	i
Fubar	50 	Very limited Flooding 	11.00	IVery limited I Flooding I Depth to I saturated zone	1 11.00 10.35 1	Very limited Flooding 	11.00
Piledriver	 	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00		 11.00 11.00 11.00 	 Very limited Ponding Flooding Depth to saturated zone 	 1.00 1.00 1.00
125: Gilmore	 80 	 Somewhat limited Depth to soft bedrock	 1.00 	 Very limited Depth to soft bedrock	 1.00 	 Somewhat limited Depth to soft bedrock Slope	 1.00 0.12
126: Gilmore	 70 	 ISomewhat limited Depth to soft bedrock Slope	 1.00 0.16		 1.00 0.16	 - Very limited Depth to soft bedrock Slope	 1.00 1.00
127: Gilmore	 75 		 1.00 1.00		 1.00 1.00	 IVery limited Slope IDepth to soft bedrock	
128: Gilmore	 	IVery limited Slope Depth to soft bedrock	 1.00 1.00	IVery limited Slope Depth to soft bedrock	1 1 11.00 11.00	 Very limited Slope Depth to soft bedrock	 1.00 1.00
129: Gilmore	 85 	IVery limited Slope Depth to soft bedrock	 1.00 1.00 		 11.00 11.00	 IVery limited Slope Depth to soft bedrock	 1.00 1.00
130: Gilmore	i 85 	IVery limited Slope Depth to soft bedrock	 1.00 1.00 	IVery limited Slope Depth to soft bedrock	 1.00 1.00 	 Very limited Slope Depth to soft bedrock	 1.00 1.00
131: Gilmore	 40 		11.00	IVery limited Depth to soft bedrock	 1.00	 Very limited Slope	11.00
		Slope 	1.00 	Slope	1.00 	Depth to soft bedrock	1.00
Ester	40 		 1.00 1.00	IVery limited	 1.00 1.00		 1.00 1.00
	 	Depth to saturated zone Content of organic matter	1.00 1.00 	Depth to saturated zone Depth to soft bedrock	1.00 	Depth to saturated zone Content of organic matter	1.00 1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements		Dwellings with basements		l commercial buildings	
	l unit	(Standard criteria)	, , ,	standard criteria)	l (Sta	andard criteria)	
	i I	Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	IValue I
132:		i I	_ i	i I	 	I	;
Gilmore	65 	Somewhat limited Depth to soft bedrock 	 1.00 	Very limited	 11.00 	Very limited	 11.00 11.00
Steese	 33 	 Not limited 			 0.20 	 Very limited Slope 	 1.00
133:						1	
Goldstream	80 	Very limited Depth to Permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00	Very limited Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00	Very limited Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00
134:	İ		i		i	İ	
Goldstream	80 	IVery limited I Depth to I permafrost I Ponding I Depth to I saturated zone I	 1.00 1.00 1.00 	Very limited Depth to Permafrost Ponding Depth to saturated zone	 11.00 11.00 11.00 	Very limited Depth to permafrost Ponding Depth to saturated zone Slope	 11.00 11.00 11.00 0.12
135: Goldstream	 50	l IVery limited	l	l IVery limited	I I	l IVery limited	I
	 	Depth to permafrost Ponding Depth to saturated zone	1.00 1.00 1.00	Depth to permafrost Ponding Depth to saturated zone	1.00 1.00 1.00	Depth to permafrost Ponding Depth to saturated zone	1.00 1.00 1.00
Histels	 45	l IVery limited	1	l IVery limited	I	l IVery limited	
	 	Depth to permafrost Ponding Subsidence Depth to saturated zone Content of organic matter	11.00 11.00 11.00 11.00 11.00 1	Depth to permafrost Ponding Subsidence Depth to saturated zone Content of organic matter	11.00 11.00 11.00 11.00 11.00	Depth to permafrost Ponding Subsidence Depth to saturated zone Content of organic matter	11.00 11.00 11.00 11.00
136: Histels	 90	l IVery limited	į	 Very limited	į	l IVery limited	į
1 101010	 	Depth to permafrost Ponding Subsidence Depth to saturated zone Content of organic matter	1.00 1.00 1.00 1.00 1.00	Depth to permafrost Ponding Subsidence Depth to saturated zone Content of organic matter	 11.00 11.00 11.00 11.00 	Depth to permafrost Ponding Subsidence Depth to saturated zone Content of organic matter	11.00 11.00 11.00 11.00
137: Jarvis	 75 	I IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of	Dwellings without basements		Dwellings with basements		commercial ouildings	
	l map l unit	 (Standard criteria)	 (S	standard criteria)	l (Sta	andard criteria)	
	i I	Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and I limiting features	Value
138:	. <u>'</u>		 	 		 	
Jarvis	55 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Chena	 . 35 	l IVery limited I Flooding	 1.00	 Very limited Flooding	 1.00	 Very limited Flooding	 1.00
139:			į		į		
Jarvis	. 45 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Salchaket	. 45 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
140: Lemeta		l IVery limited	1	l IVery limited	I	l Very limited	I
Leneta	 	Depth to permafrost Ponding Subsidence Flooding Depth to saturated zone	 1.00 1.00 1.00 1.00	Depth to permafrost Ponding Subsidence Flooding Depth to saturated zone	 1.00 1.00 1.00 1.00 1.00	Depth to Ponding Subsidence Flooding Depth to Depth to Saturated zone	1.00 1.00 1.00 1.00 1.00
141: Liscum	 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited Ponding Flooding Depth to saturated zone	 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Noonku	 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
142:	1	 	 	1	i i	 	l I
Minto	. 80 	IVery limited Depth to saturated zone	 1.00 	Very limited	 1.00 	Very limited Depth to saturated zone 	 1.00
143: Minto	 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 11.00 	 Very limited Depth to saturated zone Slope	 1.00 0.12
144: Minto	 	 IVery limited Depth to saturated zone Slope	 1.00 0.04	IVery limited Depth to saturated zone Slope	 	 IVery limited Depth to saturated zone Slope	 1.00 1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements	 	Dwellings with basements		mall commercial buildings		
	l unit	(Standard criteria)	; ; ;	standard criteria)	l (Sta	andard criteria)		
	 	Rating class and I limiting features	l Value	I Rating class and I limiting features	l Value	Rating class and I limiting features	Value 	
145:	 	 		 		 		
Minto	45 	Very limited Depth to saturated zone	 1.00 	Very limited	 1.00 	Very limited Depth to saturated zone	 1.00 	
Chatanika	 	Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99 	 Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99		 1.00 1.00 0.99	
146: Minto	 40 	 Very limited Depth to saturated zone	 1.00 	IVery limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Slope	 1.00 0.12	
Chatanika	 		 1.00 1.00 0.99 		 1.00 1.00 10.99 		 11.00 11.00 0.99 0.12	
147: Minto	 45 	 Very limited Depth to saturated zone Slope	 1.00 0.04	IVery limited Depth to saturated zone Slope	 	 Very limited Depth to saturated zone Slope	 	
Chatanika	 		 1.00 1.00 0.99 0.04		 1.00 1.00 10.99 10.04		 1.00 1.00 1.00 0.99	
148: Minto	 	 Very limited Depth to saturated zone Slope	 1.00 1.00	IVery limited Depth to saturated zone Slope	 1.00 1.00	 Very limited Slope Depth to	 1.00 1.00	
Chatanika	 		 11.00 11.00 0.99 0.63		 1 11.00 11.00 10.99 10.63	saturated zone Very limited Slope Ponding Depth to saturated zone Depth to permafrost	11.00 11.00 11.00 11.00 10.99	
149: Mosquito	 1 85 		 11.00 11.00 11.00 11.00 	I IVery limited I Ponding Flooding Depth to saturated zone Depth to permafrost I I I I I I I I I	 1 1.00 1.00 1.00 10.92 		 11.00 11.00 11.00 11.00 10.92	

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements	 	Dwellings with basements		commercial puildings	
	l unit	(Standard criteria)	, , ,	tandard criteria)	l (Sta	andard criteria)	
	 	Rating class and limiting features	Value 	Rating class and limiting features	Value	I Rating class and I limiting features	lValue I
150:	I I			[[i i	I I	
Mosquito	45	Very limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 11.00 11.00 11.00 11.00 0.92	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 11.00 11.00 11.00 0.92 	Very limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 1.00 1.00 1.00 1.00 0.92
Noonku	 40 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited	 1.00 1.00 1.00 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
151: Noonku	 80 	 IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited Ponding Flooding Depth to saturated zone	 		 1.00 1.00 1.00
152: North Pole	 85 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
153: North Pole	 50 	 IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00		 1.00 1.00 1.00		 1.00 1.00 1.00
Mosquito	 30 	IVery limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 11.00 11.00 11.00 11.00 10.92	IVery limited Ponding Flooding Depth to saturated zone Depth to permafrost I I I I I I I I I	 1.00 1.00 1.00 0.92 		 11.00 11.00 1.00 11.00 10.92
Liscum	 20 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
154: North Pole	 55 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	 Very limited Ponding Flooding Depth to saturated zone	 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Noonku	 25 	 IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements (Standard criteria)		Dwellings with basements		commercial puildings	
	l unit	l (Standard criteria)	1 (8	tandard criteria)	l (Sta	andard criteria)	
		Rating class and I limiting features	l Value	Rating class and limiting features	Value	Rating class and I limiting features	Value
155:	İ	i I	_ ; 	 	İ	I I	i
Peede	85 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
156:				 	l I	 	l I
Peede	.l 70 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Mosquito	 	Very limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 1.00 1.00 1.00 1.00 0.92		 11.00 11.00 11.00 00.92		 11.00 11.00 11.00 11.00 0.92
157:					-	 	
Piledriver	. 75 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
158: Piledriver	 E0	 Vary limited	į	 Vany limited	į	 Vary limited	į
Piledriver	 	Very limited Ponding Flooding Depth to saturated zone	11.00 11.00 11.00	Very limited	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Eielson	. 35 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 11.00 11.00 11.00	Very limited Ponding Flooding Depth to saturated zone	 11.00 11.00 11.00
159:	į		į		į		į
Piledriver	. 50 		 1.00 1.00 1.00	Very limited	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Fubar	 	 Very limited Flooding 	 1.00 	Very limited Flooding Depth to saturated zone	 1.00 0.35	I IVery limited I Flooding I	 1.00
160: Pits, gravel	 100 	 Not rated 		 Not rated 		 Not rated 	
161: Pits, quarry	 100	 Not rated 		 Not rated 		 Not rated 	
162: Riverwash	. . 100	I I INot rated		I I INot rated		I Not rated 	

Table 14. Building Site Development: Structures—Continued

and soil name	Pct of	Dwellings without basements		Dwellings with basements		commercial ouildings	
	l map l unit	(Standard criteria)	 	tandard criteria)	l (Sta	andard criteria)	
	i I I	Rating class and I limiting features	Value 	Rating class and limiting features		Rating class and I limiting features	IValue I I
163:	 	I I		 		 	
Salchaket	85 	Very limited		Very limited Ponding Flooding Depth to saturated zone		Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
164:			-		į	 	į
Salchaket	45 	Very limited Ponding Flooding Depth to saturated zone	11.00	Very limited Ponding Flooding Depth to saturated zone	11.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
Typic Cryorthents	 40 		 1.00 	lVery limited I Flooding I	 1.00 	 Very limited Flooding 	 1.00
165: Saulich	 80	l IVery limited	1	 Very limited	I	l IVery limited	I I
Catalon	 	Ponding Depth to saturated zone Content of organic matter Depth to permafrost	11.00 11.00 11.00 1 10.99	Ponding Depth to saturated zone Content of organic matter Depth to permafrost	11.00 11.00 1 11.00 1 10.99	Ponding Depth to saturated zone Content of organic matter Depth to permafrost Slope	11.00 11.00 1 11.00 1 10.99 1
166:	 	 		 	l	 	l I
Saulich	80 	Very limited Ponding Depth to saturated zone Content of organic matter Depth to permafrost Slope	 11.00 11.00 11.00 10.99 10.16 	Very limited Ponding Depth to saturated zone Content of organic matter Depth to permafrost Slope	 11.00 11.00 11.00 10.99 10.16	Very limited Ponding Depth to saturated zone Content of organic matter Slope Depth to permafrost	 11.00 11.00 11.00 11.00 0.99
167: Saulich	 75	 Very limited		 Very limited	1	 Very limited	I
	 	Ponding Depth to saturated zone Content of organic matter Slope	1.00 1.00 1.00 	Ponding Depth to saturated zone Content of organic matter Slope	1	Slope Ponding Depth to saturated zone Content of	11.00 11.00 1 11.00 1
	 		 0.99 	 Depth to permafrost	 0.99 	organic matter Depth to permafrost	 0.99
168: Saulich	 40	l IVery limited	İ	 Very limited	i	l Very limited	İ
	 	Ponding Depth to saturated zone Content of organic matter	1.00 1.00 	Ponding Depth to saturated zone Content of organic matter	1.00 1.00 	Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
	 	Depth to permafrost	10.99 	Depth to permafrost	10.99 	Depth to permafrost Slope	10.99 0.88
Minto	 40 	 Very limited Depth to	 1.00	I Very limited Depth to	 1.00	Slope Very limited Depth to	0.88 1.00
	 	saturated zone Slope	10.04 1	Saturated zone Slope 	1	Saturated zone Slope 	 1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements	 	Dwellings with basements		commercial ouildings	
	l unit	(Standard criteria)	i (S	standard criteria)	i (Sta	andard criteria)	
	i !	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and I limiting features	IValue I
169: Saulich	 	 Very limited Ponding Depth to saturated zone	 1.00 1.00		 1.00 1.00	 	 1.00 1.00
	 	Content of organic matter Slope	1.00 1.00	Content of organic matter Slope	1.00 1.00	Depth to saturated zone Content of organic matter	1.00 1.00
	; 	Depth to permafrost	i0.99 I	Depth to permafrost	0.99 	Depth to	10.99 I
Minto	35 	 Very limited Depth to saturated zone	 1.00 		 1.00 	 Very limited Slope 	 1.00
		Slope 	1.00 	Slope 	1.00 	Depth to saturated zone	1.00
170: Steese	 80 	l Not limited 	 	 Somewhat limited Depth to soft bedrock	 0.20 	 Somewhat limited Slope 	 0.12
171: Steese	 80 	 Somewhat limited Slope 	 0.16 		 0.20 0.16	 Very limited Slope 	
172: Steese	 	 Very limited Slope 	 1.00 	 IVery limited Slope Depth to soft bedrock	1 1 11.00 10.20 1	 Very limited Slope 	 1.00
173: Steese	 	 Very limited Slope 	 1.00 	 IVery limited Slope Depth to soft bedrock	 1.00 0.20 	 Very limited Slope 	 11.00
174: Steese	 	 Very limited Slope 	 1.00 	 IVery limited Slope Depth to soft bedrock	1 1 11.00 10.20 1	 Very limited Slope 	 1.00
175: Steese	 90 	 Very limited Slope 	 1.00 	 Very limited Slope Depth to soft bedrock	1 1 11.00 10.20 1	 Very limited Slope 	 1.00
176: Steese	 	 Very limited Slope 	 1.00 	 Very limited Slope Depth to soft bedrock	1 1 11.00 10.20	 Very limited Slope 	 1.00
Gilmore	25 	 Very limited Depth to soft bedrock	 1.00 	IVery limited Depth to soft bedrock	 1.00 	I IVery limited I Slope I	 1.00
		Slope	1.00 	Slope	i1.00 I	Depth to soft bedrock	 1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without basements	 	Dwellings with basements		Small commercial buildings		
	l unit	(Standard criteria)	i (S	standard criteria)	l (Sta	andard criteria)		
	 	Rating class and I limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value	
 177:	İ			[İ	 	 	
Steese	50 	Very limited Slope 	 1.00 	Very limited Slope Depth to soft bedrock	1 11.00 10.20	Very limited Slope 	 1.00 	
Gilmore	40 	Very limited Slope Depth to soft bedrock	 1.00 1.00 	 Very limited Slope Depth to soft bedrock 	 1.00 1.00 	 Very limited Slope Depth to soft bedrock 	 1.00 1.00 	
178: Steese	 50 	 Very limited Slope 	 	IVery limited Slope Depth to soft bedrock	 1.00 0.20 	 Very limited Slope 	 1.00 	
Gilmore	 40 	 Very limited Slope Depth to soft bedrock	 1.00 1.00	Very limited Slope Depth to soft bedrock	 1.00 1.00	 Very limited Slope Depth to soft bedrock	 1.00 1.00	
179:		i.	į		į		į	
Steese	45 	Very limited Slope 	 1.00 	Very limited Slope Depth to soft bedrock	 1.00 0.20 	Very limited Slope 	 1.00 	
Gilmore	 45 	 Very limited Slope Depth to soft bedrock	 1.00 1.00	IVery limited	 1.00 1.00		 1.00 1.00	
180:	l I	1	l		l I	 	l	
Tanacross	90 	Very limited Depth to Depth to permafrost Ponding Flooding Depth to saturated zone Subsidence	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to permafrost Ponding Flooding Depth to saturated zone Subsidence	 11.00 11.00 11.00 11.00 	Very limited Depth to permafrost Ponding Flooding Depth to saturated zone Subsidence	 11.00 11.00 11.00 11.00	
181:		 	Į.	None limited	ļ.	N/	l l	
Tanana	 	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86 	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	1 11.00 11.00 11.00 1 10.86	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86	
182:		1	Į.	1	į.	 	į	
Tanana	60 	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 11.00 11.00 11.00 0.86	Very limited Ponding Flooding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86	

Table 14. Building Site Development: Structures—Continued

- Tr - 2	Pct of	Dwellings without basements	İ	Dwellings with basements		l commercial buildings		
	l map l unit	 (Standard criteria)	 	tandard criteria)	(Standard criteria)			
	 	Rating class and I limiting features	Value	Rating class and limiting features 		I Rating class and I limiting features	Value 	
400	 		 	 		 		
182: Mosquito	 20 	IVery limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	1.00 		1.00 1.00 1.00 0.92		 1.00 1.00 1.00 1.00 10.92	
183:			i	İ	i	İ	i	
Typic Cryaquents	30 	IVery limited		Very limited	1.00 1.00 1.00	Very limited	 1.00 1.00 1.00	
Histic Cryaquepts	 25 	IVery limited I Ponding I Depth to I saturated zone	 1.00 1.00 	 Very limited Ponding Depth to saturated zone	1.00 1.00	 Very limited Ponding Depth to saturated zone	 1.00 1.00	
Terric Cryofibrists	 20 	Very limited	11.00		1.00 1.00 1.00 		 1.00 1.00 1.00 1.00	
184:		 	Ţ	 	Į.	 	ļ.	
Typic Cryorthents	80 	Very limited Flooding 	1 1.00 	Very limited Flooding 		Very limited Flooding 	11.00	
185: Typic Cryorthents, fill	 45 	 Very limited 		l IVery limited I	 	l IVery limited I	 	
	 	Flooding	11.00	Flooding	11.00	Flooding	11.00	
Urban land	 45 	Not rated 	i	Not rated		 Not rated 	į	
186: Urban land	 100 	I I INot rated I	 	I INot rated		 Not rated 	 	
187: Water	 100	I INot rated		I I INot rated		I INot rated		

Table 15. Building Site Development: Site Improvements

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	 Pct. of	Local roads and streets	Shallov	v excavations	
	l map l unit l	(Standard criteria)	l (Standa	ard criteria)	
	i I	Rating class and limiting features	Value	Rating class and limiting features	Value
101:	i I		i I	 	İ
Bolio	75	Very limited:	l l1.00	Very limited:	11.00
	i	Depth to permafrost Ponding	11.00	Depth to permafrost Ponding	1.00 1.00
	i	Depth to saturated	11.00	Depth to saturated	11.00
	!	l zone	1	Izone	
		Subsidence Frost action	1.00 1.00	Cutbanks cave	10.10 I
102:		N. F. ii. I	į		į
Bradway	1 85 I	IVery limited: I Ponding	11.00	IVery limited: I Ponding	11.00
	i	Depth to saturated	11.00	Depth to saturated	11.00
	į.	l zone	I .	l zone	1
	!	Frost action	11.00	Cutbanks cave	11.00
		Flooding Depth to permafrost	11.00 10.80	Depth to permafrost Flooding	10.80 10.60
103:	i i	1	l		
Chatanika	i 75	lVery limited:	i	Very limited:	i
	!	l Ponding	11.00	l Ponding	11.00
	!	Depth to saturated zone	11.00	Depth to saturated zone	11.00
		Frost action Depth to permafrost	11.00 10.99	Depth to permafrost Cutbanks cave	10.99 10.10
104:			 	1	l I
Chatanika	75	Very limited:		IVery limited:	
	-	Ponding Depth to saturated zone	1.00 1.00	Ponding Depth to saturated zone	1.00 1.00
	i	Frost action	11.00	Depth to permafrost	10.99
	İ	Depth to permafrost	10.99	Cutbanks cave	10.10
105:		N. F. S. I	į		į
Chatanika	180	Very limited: Ponding	l l1.00	Very limited: Ponding	l 1.00
	i	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	1	Frost action	11.00	Depth to permafrost	10.99
	!	Depth to permafrost	10.99	Slope	10.16
		Slope	10.16 I	Cutbanks cave	0.10
106: Chatanika		 Very limited:	l I	l IVery limited:	l I
	1	l Ponding	11.00	l Ponding	11.00
	!	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	-	Frost action Slope	1.00 1.00	Slope Depth to permafrost	11.00 10.99
	į	Depth to permafrost	10.99	Cutbanks cave	10.10
107:					-
Chatanika	55	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	l l1.00
	i	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	i	Frost action	11.00	Depth to permafrost	10.99
	I	Depth to permafrost	10.99 I	Cutbanks cave	10.10 1
Goldstream	35	 Very limited:		 Very limited:	
	I I	Depth to permafrost Ponding	1.00 1.00	Depth to permafrost Ponding	1.00 1.00
		Depth to saturated zone	11.00	Depth to saturated zone	11.00
	į	1	1	1	1
		Frost action	1.00 	Cutbanks cave	0.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	 Pct. of map	Local roads and streets	 	excavations	
	l unit I	l (Standard criteria)	l (Standa	ırd criteria)	
	 	Rating class and limiting features	Value	Rating class and limiting features	Value
108: Chena	 90 	I ISomewhat limited: I Flooding	 0.40	I IVery limited: I Cutbanks cave	 1.00
109: Dumps, landfill	 	 Not rated		 Not rated	
110: Dumps, mine	 100 	 Not rated 	i i	 Not rated 	i
111: Eielson	 80 1 1 1	IVery limited: Ponding Depth to saturated zone Frost action Flooding	 1.00 1.00 1.00 1.00	IVery limited: Ponding Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 1.00 0.60
112: Eielson	 60 	IVery limited: Ponding Depth to saturated zone Frost action Flooding	 11.00 11.00 11.00 11.00	I IVery limited: Ponding Depth to saturated zone Cutbanks cave Flooding	11.00 11.00 11.00 10.60
Piledriver			1 11.00 11.00 1 11.00 10.40		 1.00 1.00 1.00
113: Eielson	 		 1.00 1.00 1.00		1 1 11.00 11.00 1 11.00 10.60
Tanana			1 11.00 11.00 1 11.00 10.86 10.40		11.00 11.00 1 10.86 10.10
114: Ester	 		 1 1.00 1.00 11.00 11.00	IVery limited: Depth to permafrost Slope IVER Depth to saturated Zone Depth to soft bedrock Cutbanks cave	11.00 11.00 11.00 1 11.00 1 10.99 10.10
115: Ester	 		 1 1.00 1.00 1.00 1.00		1 1 11.00 11.00 11.00 10.99 1 10.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map	Local roads and streets	l Shallow	excavations	
	l unit	 (Standard criteria)	l (Standa	ard criteria)	
	 	Rating class and limiting features	Value	Rating class and limiting features	IValue I
116: Fairbanks	 . 80 	I I IVery limited: I Frost action	 1.00	I I ISomewhat limited: I Cutbanks cave	 0.50
117: Fairbanks	 . 80 	IVery limited: Frost action Slope	 11.00 0.16		 0.50 0.16
118: Fairbanks	 	IVery limited: Frost action Slope	 1.00 1.00		 1.00 0.50
119: Fairbanks	 . 80 	I IVery limited: I Slope I Frost action	 1.00 1.00	I IVery limited: I Slope I Cutbanks cave	 1.00 0.50
120: Fairbanks	 . 85 	I IVery limited: I Slope I Frost action	 11.00 11.00	IVery limited: Slope Cutbanks cave	 1.00 0.50
121: Fairbanks, strongly sloping	 . 60 	I IVery limited: I Frost action I Slope	I I I1.00 I0.16		 0.50 0.16
Fairbanks, steep	30 	Very limited: Slope Frost action	 1.00 1.00	Very limited: Slope Cutbanks cave	 1.00 0.50
122: Fairbanks	 . 55 	 Very limited: Frost action Slope	 		 11.00 0.50
Steese	30 	Very limited: Slope Frost action 	11.00 10.50 1	Very limited: Slope Cutbanks cave Depth to soft bedrock	 11.00 0.50 0.20
123: Fairbanks	 		 1.00 1.00		 1.00 0.50
Steese	.i 30 	lVery limited: I Slope I Frost action I	1 11.00 10.50 1	IVery limited: I Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20
124: Fubar	.l 50 	 Somewhat limited: Flooding 	 0.40 	IVery limited: Cutbanks cave Depth to saturated zone	 11.00 0.35
Piledriver	 40 	 Very limited: Ponding Depth to saturated zone	 1.00 1.00 		 1.00 1.00
	 	Frost action Flooding 	1.00 0.40 	Cutbanks cave	1.00

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map	Local roads and streets		v excavations	
	l unit	l (Standard criteria)	l (Standa	ard criteria)	
	i ! !	Rating class and limiting features	Value	Rating class and limiting features	Value
125:			!		!
Gilmore	180 	Somewhat limited: Depth to soft bedrock	 1.00 	Very limited: Depth to soft bedrock	 1.00
	 	Frost action	10.50 I	Cutbanks cave	10.50 I
126: Gilmore	 70 	 Somewhat limited: Depth to soft bedrock	 	 Very limited: Depth to soft bedrock	 1.00
	 	Frost action Slope 	10.50 10.16 1	Cutbanks cave Slope	10.50 10.16 1
127: Gilmore	i 75	 Very limited:	İ	l IVery limited:	İ
		Depth to soft bedrock	1.00 	Depth to soft bedrock	1.00
		Slope Frost action	1.00 0.50	Slope Cutbanks cave	1.00 0.50
128: Gilmore		 Very limited:	į	l Very limited:	į
Gilliore		Slope	11.00	Depth to soft bedrock	11.00
	į	Depth to soft bedrock	11.00	Slope	i1.00
	 	Frost action	10.50 I	Cutbanks cave	10.50 1
129: Gilmore	 85 	I IVery limited: I Slope	 1.00	 Very limited: Depth to soft bedrock	 1.00
	į	Depth to soft bedrock	11.00	Slope	1.00
	į	Frost action	0.50	Cutbanks cave	0.50 I
130: Gilmore	l l 85	 Very limited:	 	l IVery limited:	l I
	 	Slope	1.00 	Depth to soft bedrock	1.00
	l I	Depth to soft bedrock	1.00 	Slope 	1.00
	!	Frost action	10.50 !	Cutbanks cave	10.50 I
131: Gilmore	 40 	 Very limited: Depth to soft bedrock Slope Frost action	 1.00 1.00 0.50	 Very limited: Depth to soft bedrock Slope Cutbanks cave	1 11.00 11.00 10.50
Ester		 Very limited: Depth to permafrost Depth to saturated	 	 Very limited: Depth to permafrost Slope	1 11.00 11.00
		I zone I Slope I Frost action	 1.00 1.00 	Depth to saturated zone Depth to soft bedrock Cutbanks cave	1 11.00 10.99 10.10
132: Gilmore	1	 Somewhat limited:	į	 Von/limited:	į
Gilliole	 	Depth to soft bedrock Frost action	1 1.00 0.50	Very limited: Depth to soft bedrock Cutbanks cave	1 1.00 0.50
Steese	 	 Somewhat limited: Frost action 	 0.50 		 0.50 0.20

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	 Pct. of	Local roads and streets	Shallov	v excavations	
	map unit	(Standard criteria)	 (Standa	ard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
133:	i i	 	i		- ;
Goldstream		Very limited: Depth to permafrost Ponding Depth to saturated zone Frost action	 1.00 1.00 1.00 1.00	Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10
134:	i				i
Goldstream		Very limited: Depth to permafrost Ponding Depth to saturated zone Frost action	 11.00 11.00 11.00 1.00	Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10
135: Goldstream	 		 1.00 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10
Histels		Very limited: Depth to permafrost Ponding Depth to saturated zone Subsidence Frost action	 11.00 11.00 11.00 11.00	Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	11.00 11.00 11.00 10.10
136: Histels	 90 	IVery limited: Depth to permafrost Ponding Depth to saturated zone Subsidence Frost action	 11.00 11.00 11.00 11.00		1 11.00 11.00 11.00 10.10
137:				1	
Jarvis		Very limited: Ponding Depth to saturated zone Frost action Flooding	 1.00 1.00 0.50 0.40	Very limited: Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00
138: Jarvis	 55 	 Very limited: Ponding Depth to saturated zone Frost action Flooding	11.00 11.00 11.00 10.50 10.40	 Very limited: Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00
Chena		 Somewhat limited: Flooding	 0.40	 Very limited: Cutbanks cave	 1.00
139: Jarvis	 45 		11.00 11.00 10.50 10.40		 1.00 1.00 1.00
Salchaket	 45 		 1.00 1.00		
		Frost action Flooding	10.50 10.40 1	Cutbanks cave	11.00

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map	Local roads and streets	Shallov	v excavations	
	l unit	l (Standard criteria)	l (Standa	ard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
140:		 	' 		_
Lemeta	75	Very limited:	İ	IVery limited:	İ
	!	Depth to permafrost	11.00	Depth to permafrost	11.00
	!	Ponding	11.00	Ponding	11.00
	-	Depth to saturated zone	1.00 	Depth to saturated zone	11.00
	į	Subsidence	11.00	Content of organic matter	1.00
	į	Frost action	1.00	Cutbanks cave	0.10
141:		 	į	 	
Liscum	50	IVery limited: I Ponding	11.00	IVery limited: I Ponding	11.00
	i	Depth to saturated	11.00	Depth to saturated	11.00
	i	I zone	1	zone	
	I	I Frost action	11.00	Cutbanks cave	11.00
	l I	l Flooding	10.40 1	1	
Noonku	i 45	Very limited:	i	Very limited:	i
	I	l Ponding	11.00	l Ponding	11.00
	!	Depth to saturated	11.00	Depth to saturated	11.00
	!	zone		zone	
	į	Frost action Flooding	1.00 1.00	Cutbanks cave Flooding	11.00 10.60
142:	i i		i i		
Minto	i 80	Very limited:	i	Very limited:	i
	I	Depth to saturated	11.00	Depth to saturated	11.00
		I zone I Frost action	l l1.00	l zone l Cutbanks cave	l 10.50
143:	I		1		
Minto	70	Very limited:	i	Very limited:	i
	I	Depth to saturated	11.00	Depth to saturated	11.00
	l I	I zone I Frost action	l l1.00	l zone l Cutbanks cave	l 10.50
144:	I	1	1		
Minto	60	Very limited:	i	Very limited:	i
	I	Depth to saturated	11.00	Depth to saturated	11.00
	!	l zone		l zone	!
	l I	Frost action Slope	1.00 0.04	Cutbanks cave	10.50 10.04
145:	I	'	I	<u> </u>	
Minto	45	Very limited:	i	Very limited:	i
	i	Depth to saturated	11.00	Depth to saturated	11.00
	I I	zone Frost action	l l1.00	l zone l Cutbanks cave	l 10.50
0	j 	1		1	
Chatanika	40	IVery limited: I Ponding	I 1.00	IVery limited: I Ponding	11.00
	i	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	i	Frost action	11.00	Depth to permafrost	10.99
	İ	Depth to permafrost	10.99 I	Cutbanks cave	10.10
146:			į		
Minto	40	Very limited:	11.00	Very limited:	11.00
	i	Depth to saturated zone Frost action	l1.00 l1.00	Depth to saturated zone Cutbanks cave	11.00 10.50
Chatanika	 35	 Very limited:	l I	 Very limited:	
		Ponding	1.00	Ponding	11.00
	İ	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	į.	Frost action	11.00	Depth to permafrost	10.99
		Depth to permafrost	10.99	Cutbanks cave	10.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	l l Pct. l of l map	Local roads and streets	 	Shallow excavations		
	l unit I	(Standard criteria)	l (Standa	ard criteria)		
	i i	Rating class and limiting features	Value	Rating class and limiting features 	Value 	
147: Minto	 45 		 11.00 11.00 0.04	I IVery limited: Depth to saturated zone Cutbanks cave Slope	 1.00 0.50 0.04	
Chatanika	 40 	IVery limited: Ponding Depth to saturated zone Frost action Depth to permafrost Slope	1 11.00 11.00 1 11.00 10.99 10.04	IVery limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave Slope	1 11.00 11.00 1 10.99 10.10 10.04	
148: Minto	 45 	 IVery limited: Depth to saturated zone Frost action Slope	 1.00 1.00 1.00	 IVery limited: Depth to saturated zone Slope Cutbanks cave	 1.00 1.00 0.50	
Chatanika	 40 	IVery limited: Ponding Depth to saturated zone Frost action Depth to permafrost Slope	11.00 11.00 11.00 11.00 10.99 10.63	IVery limited: Ponding Depth to saturated zone Depth to permafrost Slope Cutbanks cave	1 11.00 11.00 1 10.99 10.63 10.10	
149: Mosquito	 85 1 		1 1 11.00 11.00 1 11.00 10.92 10.40		 1.00 1.00 0.92 0.10	
150: Mosquito	 		 1 1.00 1.00 1.00 0.92 0.40		 1.00 1.00 10.92 0.10	
Noonku	 40 		 1.00 1.00 1.00 1.00	IVery limited: Ponding Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 1.00 0.60	
151: Noonku	 		1 1 11.00 11.00 11.00		1 1 11.00 11.00 11.00 10.60	
152: North Pole	 85 	 Very limited: Ponding Depth to saturated zone Frost action Flooding	11.00 11.00 11.00 11.00 10.40	 IVery limited: Ponding Depth to saturated zone Cutbanks cave 	 11.00 11.00 11.00 	

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map	Local roads and streets	 Shallow 	I Shallow excavations			
	l map l unit	l (Standard criteria)	l (Standa	ard criteria)			
	; 	Rating class and limiting features	Value	Rating class and limiting features	Value 		
153:			 				
North Pole	50 	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	l l1.00		
	İ	Depth to saturated	11.00	Depth to saturated	11.00		
		I zone I Frost action I Flooding	1 11.00 10.40	zone Cutbanks cave 	11.00		
Mosquito	. l 30	l Very limited:	l I	 Very limited:	i i		
·	1	Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00		
	i	l zone	11.00	Depth to saturated zone	11.00		
		Frost action Depth to permafrost	11.00 10.92	Depth to permafrost Cutbanks cave	10.92 10.10		
	į	Flooding	10.40				
Liscum	20	lVery limited:	l I	lVery limited:	i		
		Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00		
	į	l zone	İ	l zone	1		
	!	Frost action Flooding	11.00 10.40	Cutbanks cave	1.00 		
154:			l I				
North Pole	55	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	l l1.00		
		Depth to saturated	11.00	Depth to saturated	11.00		
	 	I zone I Frost action	l l1.00	l zone l Cutbanks cave	l l1.00		
	I	Flooding	10.40 1		I		
Noonku	25	Very limited:	i	Very limited:			
		Ponding Depth to saturated	l1.00 l1.00	Ponding Depth to saturated	1.00 1.00		
	I	l zone l Frost action	l l1.00	l zone l Cutbanks cave	l l1.00		
	į	Flooding	11.00	Flooding	10.60		
155:							
Peede	85 	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	l l1.00		
	į	Depth to saturated	11.00	Depth to saturated	11.00		
		I zone I Frost action	11.00	l zone l Flooding	1 10.60		
	l	l Flooding	1.00 	Cutbanks cave	10.10 I		
156: Peede	. l 70	l IVery limited:	İ	l IVery limited:	İ		
i eeue	170	l Ponding	11.00	l Ponding	1.00		
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00 		
	I	Frost action Flooding	1.00 1.00	Flooding Cutbanks cave	10.60 10.10		
Magguita	 	I		1			
Mosquito	125	IVery limited: I Ponding	11.00	IVery limited: I Ponding	11.00		
	 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00 		
	į	I Frost action	11.00	Depth to permafrost	0.92		
		Depth to permafrost Flooding	10.92 10.40	Cutbanks cave	10.10 1		
157:			l I				
Piledriver	75	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	11.00		
	į	Depth to saturated zone	11.00	Depth to saturated zone	11.00		
	 	Frost action Flooding	11.00 10.40	Cutbanks cave	1.00 		
	İ			İ	i		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct.	Local roads and streets	Shallov	v excavations	
	l map l unit	I (Standard criteria)	(Standard criteria)		
		Rating class and I limiting features	Value	Rating class and limiting features	Value
158:	İ	 	 	 	i
Piledriver		IVery limited:		Very limited:	
	ļ	Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated zone	11.00
		I zone I Frost action I Flooding	11.00 0.40	l zone l Cutbanks cave	1.00
Eielson		IVery limited:		lVery limited:	İ
	1	Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00
	l I	I zone I Frost action	l l1.00	I zone I Cutbanks cave	l l1.00
		Flooding 	1.00 	l Flooding	10.60 I
159: Piledriver	ا 1 50	 Very limited:	 	l IVery limited:	
	1	Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00
	į	zone Frost action	11.00	zone Cutbanks cave	11.00
	į	Flooding	10.40		
Fubar	40	Somewhat limited: Flooding	 0.40	 Very limited: Cutbanks cave	 1.00
			 	Depth to saturated	10.35 I
160: Pits, gravel	1100	 Not rated	İ	 Not rated	į
_			į		į
161: Pits, quarry		Not rated	ļ	Not rated	-
162:					-
Riverwash	100 	Not rated 	l I	Not rated	l I
163: Salchaket	1 85	l Very limited:	l I	l Very limited:	l I
	 	Ponding Depth to saturated	l1.00 l1.00	Ponding Depth to saturated	1.00 1.00
	I I	l zone l Frost action	l 10.50	l zone l Cutbanks cave	l l1.00
	į	Flooding	10.40		
164:		N/ama time it and	į	None that	į
Salchaket	45	Very limited: Ponding	11.00	Very limited: Ponding	11.00
	 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	l I	Frost action Flooding	10.50 10.40	Cutbanks cave	1.00
Typic Cryorthents	l l 40	 Somewhat limited:	l I	l IVery limited:	
		Frost action Flooding	10.50 10.40 1	Cutbanks cave	1.00
165: Saulich	 80	 Very limited:	i	 Very limited:	i
		l Ponding	11.00	l Ponding	11.00
	ļ	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
		Frost action Depth to permafrost	1.00 0.99 	Content of organic matter Depth to permafrost Cutbanks cave	11.00 10.99 10.10
	i		İ	Gulbanks cave	10.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	 Pct. of map	Local roads and streets	I I Shallov I	v excavations	
	l unit	l (Standard criteria)	l (Standa	ard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
166:	 	 	 	 	
Saulich	80 	Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost Slope	 1.00 1.00 1.00 0.99 0.16	Very limited: Ponding Depth to saturated zone Content of organic matter Depth to permafrost Slope	 1.00 1.00 1.00 0.99 0.16
167:	i		i	1	i
Saulich		Very limited: Ponding Depth to saturated zone Frost action Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99	Very limited: Ponding Depth to saturated zone Content of organic matter Slope Depth to permafrost	11.00 11.00 11.00 11.00 10.99
168:	į	İ.	į	İ.	į
Saulich	40 	Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost	1 11.00 11.00 11.00 10.99	Very limited: Ponding Depth to saturated zone Content of organic matter Depth to permafrost Cutbanks cave	1 11.00 11.00 11.00 10.99 10.10
Minto		Very limited: Depth to saturated zone Frost action Slope	 1.00 1.00 0.04	Very limited: Depth to saturated zone Cutbanks cave Slope	11.00 10.50 10.04
169: Saulich	 40 1 1	IVery limited: Ponding Depth to saturated zone Frost action Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99	Very limited: Ponding Depth to saturated zone Content of organic matter Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99
Minto			 1.00 1.00 1.00	Very limited: Depth to saturated zone Slope Cutbanks cave	 1.00 1.00 0.50
170: Steese	 	 Somewhat limited: Frost action 	 0.50 	 Somewhat limited: Cutbanks cave Depth to soft bedrock	 0.50 0.20
171: Steese	 80 	 Somewhat limited: Frost action Slope	 0.50 0.16	 Somewhat limited: Cutbanks cave Depth to soft bedrock Slope	I I I0.50 I0.20 I0.16
172: Steese	 	 IVery limited: Slope Frost action 	 11.00 0.50 	 IVery limited: Slope Cutbanks cave Depth to soft bedrock	1 1 11.00 10.50 10.20
173: Steese	 75 	 IVery limited: Slope Frost action 	 1.00 0.50 		 1.00 0.50 0.20

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	l l Pct. l of l map	Local roads and streets	l Shallov I	v excavations	
	l unit	l (Standard criteria)	l (Standa	ard criteria)	
	i ! !	Rating class and limiting features	Value	Rating class and limiting features	Value
174: Steese	 85 	 Very limited: Slope Frost action	 1.00 0.50		 11.00 0.50 0.20
175: Steese	 90 	 IVery limited: Slope Frost action	 11.00 0.50 		1 11.00 10.50 10.20
176: Steese	 55 	 Very limited: Slope Frost action	 1.00 0.50 	IVery limited: Slope Cutbanks cave Depth to soft bedrock	11.00 10.50 10.20
Gilmore		Very limited: Depth to soft bedrock Slope Frost action	 11.00 11.00 0.50	Very limited: Depth to soft bedrock Slope Cutbanks cave	 11.00 11.00 0.50
177: Steese	 50 	 Very limited: Slope Frost action 	 	Very limited: Slope Cutbanks cave Depth to soft bedrock	1 11.00 10.50 10.20
Gilmore		Very limited: Slope Depth to soft bedrock Frost action	 1.00 1.00 0.50	Very limited: Depth to soft bedrock Slope Cutbanks cave	 11.00 11.00 0.50
178: Steese	 50 	IVery limited: Slope Frost action	 - 1.00 0.50 	IVery limited: Slope Cutbanks cave Depth to soft bedrock	 11.00 0.50 0.20
Gilmore	40 		 1.00 1.00 0.50	Very limited: Depth to soft bedrock Slope Cutbanks cave	 1.00 1.00 0.50
179: Steese	 45 	 Very limited: Slope Frost action 	 1.00 0.50 		 1.00 0.50 0.20
Gilmore		 Very limited: Slope 	 1.00 		 1.00
	 	Depth to soft bedrock Frost action	1.00 0.50	Slope 	1.00 0.50
180: Tanacross	 90 	IVery limited: Depth to permafrost Ponding Depth to saturated zone Frost action Subsidence	 1.00 1.00 1.00 1.00	IVery limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map	Local roads and streets	l Shallov I	v excavations	
	l unit	(Standard criteria)	(Standa	ard criteria)	
	 	Rating class and limiting features	Value	Rating class and limiting features	Value
181:	İ				_ i
Tanana	. 75	Very limited:	i	IVery limited:	i
	ĺ	l Ponding	11.00	l Ponding	11.00
	1	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	!	Frost action	1.00 0.86	Depth to permafrost	10.86
	<u> </u>	Depth to permafrost Flooding	10.40	Cutbanks cave	0.10
182:					-
Tanana	. 60	Very limited:	11.00	Very limited:	11.00
	<u> </u>	Ponding Depth to saturated zone	1.00 1.00	Ponding Depth to saturated zone	1.00 1.00
	i	Frost action	11.00	Depth to permafrost	10.86
	İ	Depth to permafrost	10.86	Cutbanks cave	10.10
	1	l Flooding	10.40 1	1	I
Mosquito	. i 20	Very limited:	i	Very limited:	i
	1	l Ponding	11.00	l Ponding	11.00
	!	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	!	Frost action	11.00	Depth to permafrost Cutbanks cave	10.92
		Depth to permafrost Flooding	10.92 10.40	Culbanks cave	0.10
183:					-
Typic Cryaquents	.130	Very limited:	11.00	Very limited:	11 00
	<u> </u>	Ponding Depth to saturated zone	1.00 1.00	Ponding Depth to saturated zone	1.00 1.00
	i	Frost action	11.00	Flooding	10.80
	İ	l Flooding	11.00	Cutbanks cave	0.10
Histic Cryaquepts	. 25	Very limited:	i	Very limited:	i
	1	Ponding	11.00	Ponding	11.00
	!	Depth to saturated zone Frost action	1.00 1.00	Depth to saturated zone Cutbanks cave	1.00 0.10
Terric Cryofibrists	. l 20	l Very limited:		l IVery limited:	
	1	l Ponding	11.00	l Ponding	11.00
	!	Depth to saturated zone	11.00	Depth to saturated zone	11.00
		Subsidence	l1.00 l	Content of organic matter	1.00
	 	Frost action	1.00 	Cutbanks cave	10.10 1
184:		 Compatibationited	I	 Van dimitade	ļ
Typic Cryorthents	.180	Somewhat limited: Frost action	10.50	IVery limited: I Cutbanks cave	11.00
	į	Flooding	10.40	Culbanks cave	
185:	i				i
Typic Cryorthents, fill	. 45	Somewhat limited:		Very limited:	
		Frost action Flooding	10.50 10.40	Cutbanks cave	1.00
Urban land	. l 45	Not rated		 Not rated	
186:	1		l		
Urban land	. 100 	Not rated	i	 Not rated 	İ
187:	1	 Not roted	į	 Not roted	į
Water	. 1100	Not rated	ı	Not rated	1

Table 16. Sanitary Facilities: Sewage Treatment

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. I of I map I unit	Septic tank absorption fields (Alaska criteria)		wage lagoons ska criteria)	
		II Rating class and	_ l Value	l Rating class and	lValue
		l limiting features	_	l limiting features	
101:	l I	 	I		I
Bolio	İ 75	Very limited:	i	Very limited:	i
	l .	Depth to permafrost	11.00	Depth to permafrost	11.00
	!	l Ponding	11.00	Ponding	11.00
	!	Depth to saturated	1.00 	Excess surface	1.00
		I zone I Depth to bedrock	11.00	organic matter Depth to saturated	l l1.00
	i	Deptil to bedrock	11.00	zone	11.00
	i	Depth to cemented	11.00	Seepage	10.50
	l I	l pan	I		l I
102:		 	į	 	į
Bradway	1 05 	IVery limited: I Flooding	11.00	IVery limited: I Ponding	11.00
	i	l Ponding	11.00	Flooding	11.00
	i	Depth to saturated	11.00	l Seepage	11.00
	ļ	l zone		1	
		Depth to bedrock	1.00 	Depth to saturated zone	1.00
	i	Depth to cemented	11.00	Depth to permafrost	10.80
		l pan	1		I
103:	!	i Na Para I	į		į
Chatanika	75	Very limited:	11 00	IVery limited: I Ponding	11 00
	-	Ponding Depth to saturated	1.00 1.00	Depth to saturated	1.00 1.00
	i	zone	1	zone	11.00
	i	Depth to bedrock	11.00	Depth to permafrost	10.99
	I	Depth to cemented	11.00	l Seepage	10.50
	I	l pan	1	I	I
		Depth to permafrost	10.99 I		l I
104: Chatanika		 Von/limitod	İ	 Vany limited:	İ
Chatanika	75 	IVery limited: I Ponding	11.00	IVery limited: I Ponding	11.00
	i	Depth to saturated	11.00	Depth to saturated	11.00
	İ	l zone	İ	Izone	İ
	I	Depth to bedrock	11.00	Depth to permafrost	10.99
		Depth to cemented pan	1.00 	Slope	l0.68 l
	İ	Depth to permafrost	0.99	l Seepage	10.50
105:		 	į	 	į
Chatanika	1 80	IVery limited: I Ponding	11.00	IVery limited: I Ponding	11.00
	i	Depth to saturated	11.00	Slope	11.00
	i	zone	1	l	
	I	Depth to bedrock	11.00	Depth to saturated zone	11.00
	į	Depth to cemented	1.00	Depth to permafrost	0.99
		I pan I Depth to permafrost	l 10.99	 Seepage	l 10.50
106:	I		l I	1	
Chatanika	80	Very limited:	i	Very limited:	i
	İ	l Ponding	11.00	l Ponding	11.00
	1	Depth to saturated zone	11.00	Slope	11.00
	!	l Slope	11.00	Depth to saturated zone	11.00
	į.	Depth to bedrock	11.00	Depth to permafrost	10.99
	1	Depth to cemented	11.00	Seepage	10.50
	1	l pan	1	1	1

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. I of I map	Septic tank absorption fields	Se	wage lagoons	
	l unit	l unit (Alaska criteria)		ska criteria)	
		Rating class and limiting features	_ Value 	Rating class and limiting features	Value
107:	İ	i I	i		i
Chatanika		Very limited:		Very limited:	
	i	Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00
	i	zone	11.00	zone	
	İ	Depth to bedrock Depth to cemented	1.00 1.00	Depth to permafrost Seepage	10.99 10.50
	 	l pan l Depth to permafrost	l 10.99		l I
0-1-1-1		 	- 1	None Contact	I
Goldstream	1 35 I	Very limited: Depth to permafrost	l 1.00	Very limited: Depth to permafrost	l 1.00
	i	Ponding	11.00	Ponding	11.00
	i	Depth to saturated	11.00	Excess surface	11.00
	I	l zone	1	l organic matter	- 1
	!	Depth to bedrock	11.00	Depth to saturated	1.00
	l I	Depth to cemented	l l1.00	l zone l Seepage	l 10.53
	į	pan		Geepage	
108:		 	-	N/ama limata da	
Chena	1 90	Very limited: Depth to bedrock	11.00	IVery limited: I Seepage	11.00
	i	Depth to bedrock Depth to cemented pan	11.00	Geepage	
	i	Depth to saturated	11.00	i	i
	l I	l zone l Flooding	l 10.40	1	l I
	i	100ding	10.40		i
109: Dumps, landfill	 100	l INot rated	I	 Not rated	l I
•			į		į
110: Dumps, mine	l 1100	 Not rated	l	 Not rated	
•			į		į
111: Eielson	80	IVery limited:		IVery limited:	
	I	l Flooding	11.00	l Ponding	11.00
	ļ.	l Ponding	11.00	Flooding	11.00
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	į	Depth to bedrock	11.00	Seepage	0.53
	l I	Depth to cemented pan	1.00 	1	l I
112:	l I	1	 		l I
Eielson	l 60	Very limited:	1	Very limited:	1
	!	Flooding	11.00	Ponding	1.00
	I	Ponding	11.00	Flooding	11.00
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	i	Depth to bedrock	11.00	Seepage	0.53
	İ	Depth to cemented	11.00	1	ĺ
	Į.	l pan	Į.		ļ
Piledriver	l l 30	l IVery limited:		 Very limited:	l I
		Ponding	11.00	Ponding	11.00
	İ	Depth to saturated zone	11.00	l Seepage	11.00
	!	Depth to bedrock	11.00	Depth to saturated zone	1.00
		Depth to cemented	11.00		l i
		l pan l Flooding	l 10.40		l I
		i i looding	10.40	İ	!

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	Septic tank absorption fields	l Se	wage lagoons	
	map unit	l (Alaska criteria)	l (Ala	ska criteria)	
		Rating class and limiting features	 Value 	Rating class and limiting features	Value
113:	 	- 		 	¦
Eielson	50 	IVery limited: I Flooding	l l1.00	IVery limited: I Ponding	l l1.00
	į	l Ponding	11.00	l Flooding	11.00
	l I	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
		Depth to bedrock	11.00	Seepage	10.53
	-	Depth to cemented pan	1.00 		
Tanana	35	 Very limited:		 Very limited:	
	l I	Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00
	1	l zone		l zone	
	l	Depth to bedrock Depth to cemented	1.00 1.00	Depth to permafrost Seepage	10.86 10.53
	 	l pan l Depth to permafrost	l 10.86		
14:	l I	 	l I		
Ester	70 	IVery limited: I Depth to permafrost	ا 11.00	IVery limited: I Depth to permafrost	l l1.00
	į	Depth to bedrock	11.00	Depth to soft	1.00
	l I	Depth to saturated	l 1.00	l bedrock l Excess surface	l 1.00
	į	l zone	İ	l organic matter	i
	l	Slope Depth to cemented	1.00 1.00	Slope Depth to saturated	1.00 1.00
	İ	l pan	İ	zone	İ
I15: Ester	 75	l IVery limited:	İ	 Very limited:	İ
	!	Depth to permafrost	11.00	Depth to permafrost	11.00
	l I	Depth to bedrock	1.00 	Depth to soft bedrock	1.00
	į	Depth to saturated	11.00	Excess surface	11.00
	l I	l zone l Slope	l l1.00	l organic matter l Slope	l l1.00
	į	Depth to cemented	11.00	Depth to saturated	11.00
	-	l pan l	-	zone	
l 16: Fairbanks	l 80	l IVery limited:	-	I Somewhat limited:	
	l I	Depth to bedrock Depth to cemented	1.00 1.00	Slope Seepage	10.68 10.53
	į	l pan	1		
		Depth to saturated zone	1.00 	 	
17:			ļ	 	
Fairbanks	1 80 	IVery limited: I Depth to bedrock	l 1.00	IVery limited: I Slope	11.00
		Depth to cemented	11.00	Seepage	10.53
	i	I pan I Depth to saturated	l 1.00		i
	l	l zone			
140.	į	I Slope I	10.16 I		!
18: Fairbanks	l 70	l IVery limited:		lVery limited:	
	I	l Slope	11.00	l Slope	11.00
		Depth to bedrock Depth to cemented	1.00 1.00	Seepage 	10.53 I
	I	l pan	1		
	1	Depth to saturated	11.00	!	!

Table 16. Sanitary Facilities: Sewage Treatment—Continued

ļ	l unit	l (Alaska criteria)	 (Alo	ska criteria)	
			_		
 		Rating class and I limiting features I	lValue I I	Rating class and I limiting features	lValue I I
119:			İ		i
Fairbanks	80	Very limited:	i	Very limited:	i
!		Slope	11.00	Slope	11.00
		Depth to bedrock Depth to cemented	1.00 1.00	Seepage	10.53
i		pan	11.00	İ	i
İ		Depth to saturated zone	1.00 	I I	i I
120: I		 	1	 	
Fairbanks	85	Very limited:	İ	Very limited:	İ
!		Slope	11.00	Slope	11.00
		Depth to bedrock Depth to cemented	1.00 1.00	l Seepage	10.53
i		pan	11.00	i	i
İ		Depth to saturated zone	11.00 I	 	İ
121: I		 	l I	 	
Fairbanks, strongly I sloping	l 60	IVery limited:	I	Very limited:	I
j		Depth to bedrock	11.00	Slope	11.00
!		Depth to cemented	11.00	Seepage	10.53
		pan Depth to saturated	l 1.00	1	-
i		zone	11.00	İ	i
į		l Slope	0.16		į
Fairbanks, steep	30	Very limited:	i	Very limited:	i
· · ·		l Slope	11.00	l Slope	11.00
!		Depth to bedrock	11.00	Seepage	10.53
		Depth to cemented pan	11.00	1	-
i		Depth to saturated	1.00		i
į		zone	I	İ	į
122: Fairbanks	 55	 Very limited:	į	 Very limited:	į
i alibatiks	55	Slope	1.00	Slope	11.00
i		Depth to bedrock	11.00	l Seepage	10.53
		Depth to cemented pan	11.00		l I
ļ		Depth to saturated	11.00		i
		l zone			
Steese	30	IVery limited:		IVery limited:	1
!		Depth to bedrock	11.00	Depth to soft bedrock	11.00
		Slope Depth to cemented pan	1.00 1.00	Slope Seepage	1.00 1.00
į		Depth to saturated zone	11.00	 	
123:		İ	i		İ
Fairbanks	40	IVery limited:		Very limited:	
I		Slope Depth to bedrock	1.00 1.00	Slope Seepage	1.00 0.53
		Depth to cemented pan	11.00	Ocepaye	
į		Depth to saturated zone	11.00	1	į
Steese	30	IVery limited:	i	IVery limited:	
ļ		Depth to bedrock	11.00	Depth to soft	11.00
 		l Slope	l 1.00	l bedrock l Slope	11.00
į		Depth to cemented pan	11.00	Seepage	11.00
I		Depth to saturated zone	1.00 	!	1

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map	Septic tank absorption fields	l Se	wage lagoons	
	l map	l (Alaska criteria)	l (Ala	ska criteria)	
	 	Rating class and limiting features	I IValue I	Rating class and limiting features	Value
24:	i	- 	i		i
Fubar	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00 	Seepage	1.00
	İ	Depth to bedrock	11.00	Depth to saturated	0.17
	i	Depth to cemented	11.00	zone	i
	 	l pan l Flooding	l 10.40		
Piledriver	∣ 40	l IVery limited:	l I	 Very limited:	l I
	1	l Ponding	11.00	l Ponding	11.00
	1	Depth to saturated zone	1.00 	Seepage	1.00
	i I	Depth to bedrock	1.00 	Depth to saturated zone	1.00
	I	Depth to cemented	11.00		I
		l pan l Flooding	0.40		
25:	į		į		į
Gilmore	I 80 I	Very limited: Depth to bedrock	l l1.00	IVery limited: I Depth to soft	l l1.00
	İ	1	I	l bedrock	I
		Depth to cemented pan	1.00 	Seepage 	1.00
	 	Depth to saturated zone	1.00 	Slope	10.68 1
26:	 		l I		
Gilmore	l 70 .l	Very limited: Depth to bedrock	l l1.00	IVery limited: I Depth to soft	 1.00
	į	1	1	l bedrock	1
		Depth to cemented pan	1.00 	Slope 	1.00
	I	Depth to saturated	11.00	Seepage	1.00
	 	zone Slope	10.16	 	
27:		l I		N. F. S. I	
Gilmore	1 /5 	IVery limited: I Depth to bedrock	l 1.00	IVery limited: I Depth to soft	l l1.00
	I	1	 1.00	l bedrock	
	i	I Slope I Depth to cemented	11.00	Slope Seepage	1.00 1.00
	I	I pan I Depth to saturated	l l1.00		I
	i i	zone			į
28:	 70	 	į	 	į
Gilmore	1 70	IVery limited: I Depth to bedrock	11.00	Very limited: Depth to soft bedrock	11.00
	1	Slope Depth to cemented	11.00	Slope	1.00 1.00
	i	Depth to cemented pan	1.00 	Seepage	
	 	Depth to saturated zone	l1.00 l		
29:	 	1	l I	 	l I
Gilmore	l 85	Very limited: Depth to bedrock	l l1.00	Very limited: Depth to soft bedrock	l l1.00
	!			Slope	11.00
	1	l Slope	11.00		
		Slope Depth to cemented pan	11.00	Seepage	11.00

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	 Septic tank absorption fields	l Se	wage lagoons	
	l map l unit	l (Alaska criteria)	l (Ala	ska criteria)	
	 	Rating class and limiting features	Value 	Rating class and limiting features	lValue I
130:	l I		l I		l !
Gilmore	85 	Very limited: Depth to bedrock 	 1.00 	Very limited: Depth to soft bedrock	 1.00
	 	Slope Depth to cemented pan	1.00 1.00 	I Slope I Seepage	1.00 1.00
	İ	Depth to saturated zone	11.00		İ
131:		 Van/limitad		 	
Gilmore	40 	Very limited: Depth to bedrock 	1 1.00 	Very limited: Depth to soft bedrock	 1.00
		Slope Depth to cemented pan	1.00 1.00	Slope Seepage	1.00 1.00
	i	Depth to saturated	11.00		i
Ester	40	l Very limited:		IVery limited:	
	l !	Depth to permafrost Depth to bedrock	1.00 1.00	Depth to permafrost Depth to soft	1.00 1.00
	 	l Depth to saturated l zone	l 1.00 	l bedrock l Excess surface l organic matter	 1.00
	i	Slope Depth to cemented	 1.00 1.00	Slope Depth to saturated	1.00 1.00
	 	l pan l		l zone	
132: Gilmore	65	 Very limited: Depth to bodrook		 Very limited: Don'th to poft	
		Depth to bedrock Depth to cemented	1.00 1.00	I Depth to soft I bedrock I Seepage	1.00 1.00
		pan Depth to saturated zone	 1.00	Slope	 1.00
Steese	133	 IVery limited:	i	 Very limited:	į
	 	Depth to bedrock	11.00	Depth to soft bedrock	11.00
	į	l Depth to cemented	1.00	l Seepage	11.00
	į	Depth to saturated	1.00	Slope	1.00
133:		 	l I		ļ
Goldstream	l 80	Very limited: Depth to permafrost	1.00	Very limited: Depth to permafrost	11.00
		Ponding Depth to saturated	1.00 1.00	Ponding Excess surface	1.00 1.00
	I	zone Depth to bedrock	l l1.00	organic matter Depth to saturated zone	l l1.00
		Depth to cemented pan	1.00 	Seepage	10.53
134: Goldstream	 80	 Very limited:		 Very limited:	i
S S I G G G G G G G G G G G G G G G G G		Depth to permafrost	11.00	Depth to permafrost	11.00
	I I	Ponding Depth to saturated	1.00 1.00	Ponding Excess surface	1.00 1.00
	I	zone Depth to bedrock	l l1.00	organic matter Depth to saturated zone	l l1.00
	i I	Depth to cemented pan	11.00	Slope	10.68 1
	İ	F ==	i	i	i

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map	Septic tank absorption fields	 	wage lagoons	
	l unit	l (Alaska criteria)	l (Ala	ska criteria)	
	i I	Rating class and limiting features	IValue	Rating class and I limiting features	Value
135:					İ
Goldstream	50 	Very limited: Depth to permafrost Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	 1.00 1.00 1.00 1.00 1.00	Very limited: Depth to permafrost Ponding Excess surface organic matter Depth to saturated zone Seepage	 1.00 1.00 1.00 1.00 0.53
Histels	 		 1.00 1.00 1.00 1.00 1.00		 1.00 1.00 1.00 1.00 0.50
136: Histels	∣ । 90	l IVery limited:		 Very limited:	
Tilstels	 	Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00	Depth to permafrost Ponding Excess surface organic matter	1.00 1.00 1.00
	 	I Subsidence I I Depth to bedrock I	1.00 1.00 	Depth to saturated zone Seepage	1.00 0.50
137:		 } }/am, limitade	1	 	1
Jarvis		Very limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	1 1.00 1.00 1.00 1.00	Very limited: Ponding Seepage Depth to saturated zone	1 1.00 1.00 1.00
	į	l Flooding	0.40	į	į
138:		 	İ		
Jarvis	55 	Very limited: Ponding Depth to saturated	 1.00 1.00	Very limited: Ponding Seepage	l l1.00 l1.00
	 	zone Depth to bedrock	11.00	Depth to saturated	11.00
		Depth to cemented pan Flooding	11.00 1 10.40		
Chena	35 	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Flooding	 1.00 1.00 1.00 0.40	IVery limited: I Seepage I I I	 11.00
139: Jarvis	 	IVery limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Flooding	 1.00 1.00 1.00 1.00 0.40	 Very limited: Ponding Seepage Depth to saturated zone 	 1.00 1.00 1.00
Salchaket	45 	IVery limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Flooding	 1.00 1.00 1.00 1.00 0.40		 1.00 1.00 1.00

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	Septic tank absorption fields	Se	wage lagoons	
	l map l unit	 (Alaska criteria)	l (Ala	ska criteria)	
		Rating class and limiting features	Value	Rating class and I limiting features	Value
140:	i	- <u> </u>	i	 	i
Lemeta		Very limited: Depth to permafrost Ponding Depth to saturated zone Subsidence Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	IVery limited: Depth to permafrost Ponding Excess surface organic matter Seepage Depth to saturated zone	11.00 11.00 11.00 11.00 11.00
141:					į
Liscum		Very limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented	 1.00 1.00 1.00 	Very limited: Ponding Excess surface organic matter Depth to saturated zone Seepage	11.00 11.00 1 11.00 1 10.53
	ļ !	l pan l Flooding	l 0.40		ļ
Noonku	 		 1.00 1.00 1.00 1.00 		 11.00 11.00 11.00 11.00 1
142:					l
Minto		Very limited: Depth to saturated zone Massive ice possible below 6 feet, high subsidence potential Depth to bedrock Depth to cemented pan	 1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Massive ice possible below 6 feet, high subsidence potential Seepage	 11.00 11.00
143:		 			
Minto	70 	Very limited: Depth to saturated zone Massive ice possible below 6 feet, high subsidence potential	 1.00 1.00 	Very limited: Depth to saturated zone Massive ice possible below 6 feet, high subsidence potential	 1.00 1.00
	i	Depth to bedrock Depth to cemented pan	1.00 1.00	Slope Seepage	0.68 0.53
144:	l		 		l I
Minto	l 60	Very limited: Depth to saturated	 1.00	Very limited: Slope	 1.00
		I zone I Massive ice possible I below 6 feet, high I subsidence	 1.00 	Depth to saturated zone	 1.00
		I potential I Depth to bedrock I	 1.00 	I Massive ice possible below 6 feet, high subsidence potential	 1.00
	 	I Depth to cemented pan I Slope	 1.00 0.04 	 Seepage 	 0.53

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	Septic tank absorption fields	Se	wage lagoons	
	map unit	 (Alaska criteria)	l (Ala	ska criteria)	
	 	Rating class and limiting features	I Value 	Rating class and I limiting features	IValue
145:	i I		i		i
Minto	1 45	IVery limited:		IVery limited:	
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	İ	I Massive ice possible	11.00	Massive ice possible	11.00
	1	l below 6 feet, high l subsidence		l below 6 feet, high l subsidence	l I
	i	l potential	i	l potential	i
		Depth to bedrock	11.00	Seepage	10.53
		Depth to cemented pan	1.00 		
Chatanika	l .l 40	l IVery limited:	ļ	lVery limited:	
	1	Ponding	11.00	Ponding	11.00
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	İ	Depth to bedrock	11.00	Depth to permafrost	10.99
	1	Depth to cemented pan	11.00	l Seepage	10.50
	i	Depth to permafrost	10.99		i
4.40.	1		1		
146: Minto	1 .l 40	I IVery limited:	-	IVery limited:	i
	İ	Depth to saturated	11.00	Depth to saturated	11.00
		l zone l Massive ice possible	l l1.00	l zone l Massive ice possible	 1.00
	i	below 6 feet, high	11.00	below 6 feet, high	
	!	l subsidence	!	l subsidence	ļ.
	1	potential Depth to bedrock	l 1.00	l potential l Slope	l 10.68
	i	Depth to cemented	11.00	Seepage	10.53
	1	l pan	l I		
Chatanika	. 35	Very limited:	i	Very limited:	i
		Ponding	11.00	Ponding	11.00
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	!	Depth to bedrock	11.00	Depth to permafrost	10.99
	1	Depth to cemented pan	1.00 	Slope	l0.68
	į	Depth to permafrost	0.99	Seepage	0.50
147:					i
Minto	1 45	IVery limited:	1	IVery limited:	
	1	Depth to saturated zone	1.00 	Slope	1.00
	i	Massive ice possible	11.00	Depth to saturated	11.00
		l below 6 feet, high l subsidence	- !	zone	l I
		l subsidence l potential	i		i
	ļ.	Depth to bedrock	11.00	Massive ice possible	1.00
	1	1	1	l below 6 feet, high l subsidence	l I
	i	i	i	l potential	i
	1	Depth to cemented pan	1.00	Seepage	10.53
	i	l Slope	10.04		İ
Chatanika	140	 Von/limited:	l I	 Von/limited:	l I
Chatanika	. 40 	IVery limited: I Ponding	11.00	IVery limited: I Ponding	l 1.00
	ļ.	Depth to saturated zone	11.00	l Slope	11.00
	I	Depth to bedrock Depth to cemented pan	1.00 1.00	Depth to saturated zone Depth to permafrost	1.00 0.99
	i	Depth to permafrost	10.99	Seepage	10.50
	1	1	1	1	I

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	Septic tank absorption fields	Se	wage lagoons	
	map unit 	l (Alaska criteria)	l (Ala	ska criteria)	
	i i i	Rating class and limiting features	IValue	Rating class and limiting features	IValue I I
148:			l !	 	! !
Minto	l 45 	Very limited: Depth to saturated zone	 1.00	Very limited: Slope	 1.00
		Massive ice possible below 6 feet, high subsidence potential	11.00 	Depth to saturated zone	11.00
		Slope	11.00	Massive ice possible below 6 feet, high subsidence	1.00
	 	Depth to bedrock Depth to cemented pan	 1.00 1.00 	potential Seepage 	1 10.53 1 1
Chatanika	 40 	 Very limited: Ponding Depth to saturated	 1.00 1.00	I IVery limited: I Ponding I Slope	 1.00 1.00
	į	zone Depth to bedrock	11.00	Depth to saturated	I I I1.00
	i I	l Depth to cemented	l l1.00	zone Depth to permafrost	l 10.99
	l !	pan Depth to permafrost	l l0.99	l Seepage	l 10.50
149:		 	ļ	None limited	
Mosquito	85 	Very limited: Ponding Depth to saturated	 1.00 1.00	Very limited: Ponding Excess surface	 1.00 1.00
		zoneDepth to bedrockDepth to cemented	l 1.00 1.00	I organic matter I Seepage I Depth to saturated	 1.00 1.00
		l pan l Depth to permafrost	l 0.92	zone Depth to permafrost	l 0.92
150: Mosquito	 45	I IVery limited:		 Very limited:	į
Mooquito	 	Ponding Depth to saturated	 1.00 1.00	Ponding Excess surface	 1.00 1.00
	İ	zone Depth to bedrock	l l1.00	l organic matter l Seepage	I I1.00
	İ	Depth to cemented pan	11.00	Depth to saturated zone	11.00
	i I	Depth to permafrost	10.92	Depth to permafrost	10.92 1
Noonku	l 40 l	IVery limited: I Flooding	l l1.00	IVery limited: I Ponding	l l1.00
		Ponding Depth to saturated	1.00 1.00	Flooding Seepage	1.00 1.00
	į	l zone l Depth to bedrock	l 1.00 	Depth to saturated	l l1.00
		Depth to cemented pan	 1.00 		i i
151:		 		None limited	!
Noonku	1 80 	Very limited: Flooding	11.00	Very limited: Ponding	11.00
		Ponding Depth to saturated	1.00 1.00 	Flooding Seepage 	1.00 1.00
		zone Depth to bedrock 	 1.00 	Depth to saturated zone	 1.00
		Depth to cemented pan	1.00 		I I

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	Septic tank absorption fields	l Se	wage lagoons	
	l map l unit	l (Alaska criteria)	l (Ala	ska criteria)	
		Rating class and limiting features	I Value 	Rating class and limiting features	Value
152:	' 	_ 	- ; i		; i
North Pole	85	Very limited:	İ	Very limited:	İ
	- !	l Ponding	11.00	Ponding	11.00
		Depth to saturated zone	11.00	Seepage	11.00
	į	Depth to bedrock	1.00	Depth to saturated	11.00
	1	Depth to cemented	l l1.00	zone	l I
	i	pan	11.00	i	i
	į	Flooding	0.40	į	į
53:	l		l I		
North Pole	İ 50	lVery limited:	i	lVery limited:	i
	1	l Ponding	11.00	l Ponding	11.00
		Depth to saturated	11.00	Seepage	1.00
	-	I zone I Depth to bedrock	11.00	Depth to saturated	11.00
	i		I	zone	1
	I	Depth to cemented	11.00		!
	İ	l pan l Flooding	10.40		-
	i	I	i	i	i
Mosquito	30	Very limited:		IVery limited:	
	1	Ponding Depth to saturated	1.00 1.00	Ponding Excess surface	1.00 1.00
	i	zone	11.00	organic matter	
	İ	Depth to bedrock	11.00	l Seepage	11.00
	!	Depth to cemented	11.00	Depth to saturated	11.00
	l	I pan I Depth to permafrost	l 10.92	zone Depth to permafrost	l 10.92
	1	1	1	I i	1
Liscum	20	IVery limited: I Ponding	l 1.00	Very limited: Ponding	l 1.00
	i	Depth to saturated	11.00	Excess surface	11.00
	i	l zone	i	l organic matter	i
	!	Depth to bedrock	11.00	Depth to saturated zone	11.00
	l	Depth to cemented pan Flooding	11.00 10.40	Seepage	10.53 I
	į	 	İ	į	į
I54: North Pole	 55	l IVery limited:	l I	 Very limited:	-
1101111 010		l Ponding	1.00	l Ponding	11.00
	1	Depth to saturated zone	11.00	l Seepage	11.00
	l I	Depth to bedrock Depth to cemented pan	1.00 1.00	Depth to saturated zone	1.00
	i		10.40		į
	į	I	1	i.	į
Noonku	25	IVery limited: I Flooding	l l1.00	IVery limited: I Ponding	 1.00
	i	l Ponding	11.00	Flooding	11.00
	i	Depth to saturated	11.00	Seepage	11.00
	!	zone		1	
	-	Depth to bedrock Depth to cemented pan	1.00 1.00	Depth to saturated zone	11.00
	i			i	i
55:			!	 	į.
Peede	85	IVery limited: I Flooding	l l1.00	Very limited: Ponding	l l1.00
		Flooding Ponding	11.00	Flooding	11.00
	i	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	1	Depth to bedrock	11.00	l Seepage	10.50
	I	Depth to cemented	11.00		I
	I	l pan		1	ı

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	l l Pct. l of l map	Septic tank absorption fields	I I Se I	wage lagoons	
	l unit	(Alaska criteria)	l (Ala	ska criteria)	
		Rating class and limiting features	_ I Value 	Rating class and limiting features	IValue I
156:	i		- ' 		i
Peede		Very limited:	i	Very limited:	i
	l	l Flooding l Ponding	11.00	Ponding	11.00
	i	Depth to saturated	1.00 1.00	Flooding Depth to saturated	1.00 1.00
	i	zone	i	l zone	İ
	 	Depth to bedrock Depth to cemented pan	1.00 1.00 	Seepage 	10.50
Mosquito	1 25	l IVery limited:	l I	 Very limited:	l I
wosquito		Ponding	11.00	Ponding	11.00
	i	Depth to saturated	11.00	l Excess surface	11.00
		zone		l organic matter	
		Depth to bedrock Depth to cemented	1.00 1.00	Seepage Depth to saturated	1.00 1.00
	i	l pan	I	l zone	I
	l	Depth to permafrost	10.92	Depth to permafrost	l0.92
157:	į	<u>i</u>	į		į
Piledriver	l 75	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	l l1.00
	i	Depth to saturated	11.00	Seepage	11.00
		zone		1	
		Depth to bedrock	1.00 	Depth to saturated zone	1.00
	l I	Depth to cemented pan	1.00 		l I
	i	l Flooding	0.40	İ	i
158:	l	l I	l		l I
Piledriver	i 50	Very limited:	i	lVery limited:	i
	1	Ponding	11.00	Ponding	11.00
		Depth to saturated zone	1.00 	Seepage	1.00
	!	Depth to bedrock	1.00	Depth to saturated	1.00
	l	Depth to cemented	l l1.00	l zone	l I
	į	l pan	1		į
	l I	l Flooding l	10.40 1		l I
Eielson	35	IVery limited:		IVery limited:	
		l Flooding l Ponding	1.00 1.00	l Ponding l Flooding	1.00 1.00
	i	Depth to saturated	11.00	Depth to saturated	11.00
		zone		zone	
		Depth to bedrock Depth to cemented	1.00 1.00	Seepage 	10.53 I
		l pan	I		I
159:	İ	i	i		i
Piledriver		Very limited:		Very limited:	
	l I	Ponding Depth to saturated	1.00 1.00	l Ponding l Seepage	1.00 1.00
	ļ	l zone		1	
		Depth to bedrock	1.00 	Depth to saturated zone	1.00
	į	Depth to cemented	11.00		į
		l pan l Flooding	l 10.40		l I
		ı	1	 	į
Fubar	40	IVery limited: I Depth to saturated zone	l l1.00	IVery limited: I Seepage	l l1.00
	i	Depth to bedrock	11.00	Depth to saturated zone	10.17
	İ	Depth to cemented	11.00		Ī
	1	pan	 0.40		l I
		Flooding	10.40 1	 	

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map	Septic tank absorption fields	Se	wage lagoons	
	unit (Alaska criteria)	(Alaska criteria)			
		Rating class and limiting features	_ I Value 	Rating class and limiting features	Value
160: Pits, gravel	 	 Not rated	 	 	
161: Pits, quarry	100	 Not rated	İ	 Not rated	İ
162: Riverwash	100	 Not rated		 Not rated	į
163: Salchaket	 85 	I Very limited: Ponding Depth to saturated	 1.00 1.00	I IVery limited: I Ponding I Seepage	 1.00 1.00
	 	l zone l Depth to bedrock l l Depth to cemented l pan	 1.00 1.00 	Depth to saturated	 1.00
164: Salchaket	 45 	Flooding Very limited: Ponding Depth to saturated	0.40 1.00 1.00	I I IVery limited: I Ponding I Seepage	 1.00
	 	I zone I Depth to bedrock I I Depth to cemented I pan I Flooding	 1.00 1.00 0.40	Depth to saturated	 1.00
Typic Cryorthents	 40 	IVery limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Flooding	 1.00 1.00 1.00 0.50 0.40	 Very limited: Seepage 	 1.00
165: Saulich	 80 	I IVery limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Depth to permafrost	 1.00 1.00 1.00 1.00 		 1.00 1.00 11.00 1.00 10.99
166: Saulich	 80 1 	I IVery limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Depth to permafrost	 11.00 11.00 11.00 10.99	I IVery limited: Ponding Excess surface organic matter Slope Seepage Depth to saturated zone	 1.00 1.00 11.00 1.00 1.00
167: Saulich	 	I I I I I I I I I I	 1.00 1.00 1.00 1.00	I IVery limited: Ponding Excess surface organic matter Slope Seepage Depth to saturated zone	 1 1.00 1.00 1.00 1.00

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	l Septic tank l absorption fields	l I Se	wage lagoons	
	l map l unit	l I (Alaska criteria)	l I (Ala	ska criteria)	
		Rating class and limiting features	 Value 	Rating class and limiting features	lValue I I
168:	 	 	 	 	
Saulich	40 	IVery limited: I Ponding I Depth to saturated	l l1.00 l1.00	Very limited: Ponding Excess surface	 1.00 1.00
		I zone I Depth to bedrock I Depth to cemented I pan	 1.00 1.00 	Organic matter Seepage Depth to saturated zone	 1.00 1.00
Minto	 40	Depth to permafrost Very limited:	10.99 	Slope Very limited:	1.00
	İ	Depth to saturated zone	1.00 	Depth to saturated zone	11.00
		Massive ice possible below 6 feet, high subsidence potential	1.00 	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock Depth to cemented	1.00 1.00	Slope Seepage	11.00 10.53
	 	l pan l Slope l	l 10.04 I	 	
169: Saulich	i l 40	, I IVery limited:	i i	IVery limited:	i
		Ponding Depth to saturated	1.00 1.00	Ponding Excess surface	1.00 1.00
		l zone l Slope	l l1.00	l organic matter	l 1.00
		Depth to bedrock Depth to cemented pan	1.00 1.00 	Seepage Depth to saturated zone	1.00 1.00
Minto	35	 Very limited: Depth to saturated zone	 1.00		 1.00
		I Massive ice possible I below 6 feet, high I subsidence I potential	1.00 	Depth to saturated zone	1.00
		Slope	1.00 	Massive ice possible below 6 feet, high subsidence	1.00
		Depth to bedrock Depth to cemented pan	 1.00 1.00 	I potential I Seepage I I	 0.53
170: Steese	l 80	 Very limited:	İ	l IVery limited:	İ
	 	Depth to bedrock	1.00 	Depth to soft bedrock	1.00
	l	Depth to cemented pan	1.00 	Seepage 	1.00
	 	Depth to saturated zone	1.00 	I Slope I	10.68 I I
171: Steese	80 	 Very limited: Depth to bedrock	 1.00	 IVery limited: Depth to soft	 1.00
		Depth to cemented	11.00	l bedrock l Slope	 1.00
		pan Depth to saturated	11.00	l Seepage	11.00
		l zone l Slope	l 0.16 		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct.	Septic tank absorption fields	l Se	wage lagoons	
	map	l (Alaska criteria)			
		Rating class and limiting features	_ Value 	Rating class and I limiting features	Value
172: Steese	 70 		 1.00 1.00 1.00 1.00	 IVery limited: Depth to soft bedrock Slope Seepage 	 11.00 11.00 1.00
73: Steese	 75 		 11.00 11.00 11.00 11.00		 11.00 11.00 1.00
74: Steese	 85 		 1.00 1.00 1.00 1.00	 IVery limited: Depth to soft bedrock Slope Seepage 	 11.00 11.00 11.00
75: Steese	 90 		 11.00 11.00 11.00 11.00	 IVery limited: Depth to soft bedrock Slope Seepage 	 11.00 11.00 1.00
176: Steese	 		 11.00 11.00 11.00 11.00		
Gilmore	 25 	IVery limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00	IVery limited: Depth to soft bedrock Slope Seepage I	 1.00 1.00 1.00
177: Steese	 50 		 1.00 1.00 1.00 1.00		 11.00 11.00 11.00
Gilmore	40	Very limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 		 11.00 11.00 1.00

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map	I Septic tank I absorption fields	Se	wage lagoons	
	l unit	(Alaska criteria)	l (Ala	ska criteria)	
		I Rating class and I limiting features	I Value 	Rating class and limiting features	lValue I
178: Steese	 	I I IVery limited: I Depth to bedrock I Slope I Depth to cemented pan I Depth to saturated zone	 1.00 1.00 1.00	I IVery limited: I Depth to soft bedrock I Slope I Seepage I	 1.00 1.00 1.00
Gilmore	 	IVery limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00	 IVery limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
179: Steese	 	IVery limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00		 1.00 1.00 1.00
Gilmore	 	IVery limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00	IVery limited: Depth to soft bedrock Slope Seepage I	 1.00 1.00 1.00
180:	i	i I	i	1	i
Tanacross	90 	Very limited: Depth to permafrost Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	 11.00 11.00 11.00 11.00 1	Very limited: Depth to permafrost Ponding Excess surface organic matter Depth to saturated zone Seepage	 11.00 11.00 11.00 11.00 0.53
181: Tanana	 	IVery limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Depth to permafrost	 1.00 1.00 11.00 1.00 0.86	IVery limited: Ponding Depth to saturated zone Depth to permafrost Seepage I	 1.00 1.00 0.86 0.53
182: Tanana	 	IVery limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Depth to permafrost	 1.00 1.00 1.00 1.00 0.86	IVery limited: Ponding Depth to saturated zone Depth to permafrost Seepage	I I1.00 I1.00 I I0.86 I0.53
Mosquito	 20 	 IVery limited: Ponding Depth to saturated zone Depth to bedrock	 1.00 1.00 1.00	IVery limited: Ponding Excess surface organic matter I Seepage Depth to saturated	 11.00 11.00 11.00
		Depth to cemented pan Depth to permafrost 	1.00 0.92 	Depth to saturated zone Depth to permafrost	1.00 0.92

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	 Pct. of map unit	 Septic tank absorption fields (Alaska criteria)	1	vage lagoons ska criteria)	
	 	Rating class and limiting features	I IValue I	Rating class and Ilimiting features	Value
183: Typic Cryaquents	 30 1 1 1 1		 11.00 11.00 11.00 11.00 11.00		 1 11.00 11.00 11.00 10.01
Histic Cryaquepts	 25 		 1.00 1.00 1.00 1.00		 1.00 1.00 1.00 1.00
Terric Cryofibrists	 20 	Very limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	 1.00 1.00 1.00 1.00		 11.00 11.00 11.00 11.00
184: Typic Cryorthents	 80 		 1.00 1.00 1.00 0.40 0.31	 Very limited: Seepage 	 11.00
185: Typic Cryorthents, fill	 45 		 1.00 1.00 1.00 0.50 0.40	 IVery limited: Seepage 	 1.00
Urban land	 45 	INot rated		 Not rated 	
186: Urban land	 100 	l Not rated	 	 Not rated	
187: Water	 100 	 Not rated 	 	 Not rated 	

Table 17. Sanitary Facilities: Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	IPct.	l landfill		ea sanitary andfill		y cover for andfill	
	lmap lunit		I I (Stan	dard criteria)	l (Stan	ndard criteria)	
	i i	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value
101:	 	 	 	I I		1	
Bolio	75 	Depth to saturated	 1.00 1.00	Very limited: Depth to permafrost Ponding	 1.00 1.00	Very limited: Depth to permafrost Ponding	 1.00 1.00
		l zone l Ponding	11.00	Depth to saturated	1.00	Depth to saturated	1.00
		l matter	1 1.00 0.40	zone Flooding 	 0.40 	zone Content of organic matter	1 1.00
102:		I I] 			
Bradway		Depth to saturated	 1.00 1.00	Very limited: Flooding Ponding	 1.00 1.00	IVery limited: I Ponding I Depth to saturated	 1.00 1.00
		l Too Sandy	 1.00 1.00 0.80	Depth to saturated zone Seepage Depth to permafrost	 1.00 1.00 0.80	I zone I Too Sandy I Depth to permafrost I Seepage	11.00 10.80 10.52
103:		 	 	1 1			
Chatanika	75 		 1.00	IVery limited: I Ponding	11.00	Very limited: Ponding	11.00
		l zone l Ponding	11.00	Depth to saturated	11.00	Depth to saturated	11.00
		Depth to permafrost	1 10.99	zone Depth to permafrost	10.99	zone Depth to permafrost	10.99
104: Chatanika		I Very limited:	 	 Very limited:	İ	 Very limited:	
		Depth to saturated zone	l1.00 l	l Ponding	1.00 	Ponding	1.00
	 		11.00 10.99 1	Depth to saturated zone Depth to permafrost	1.00 0.99 	Depth to saturated zone Depth to permafrost	el1.00 l0.99
105: Chatanika	i 180	I Very limited:	İ	IVery limited:	į	l IVery limited:	į
Onatariika			 1.00	Ponding	1.00	Ponding	1.00
	į		 1.00	Depth to saturated	1.00	Depth to saturated	1.00
	į		10.99 10.16	Depth to permafrost	10.99 10.16	Depth to permafrost Slope	10.99 10.16
106:		 	! !	 Vantimitade		 }	
Chatanika	180	Very limited: Depth to saturated zone		IVery limited: I Ponding	1.00	Very limited: Ponding	1.00
		l Slope	1.00 1.00 0.99	Depth to saturated zone Slope Depth to permafrost	1.00 1.00 0.99	Depth to saturated zoneSlopeDepth to permafrost	11.00 1.00 0.99
107:		Deptil to permanost	10.99	Deptir to permanost	10.99	Deptil to permanost	10.99
107: Chatanika		 Very limited: Depth to saturated zone	 1.00	I IVery limited: I Ponding	11.00	I IVery limited: I Ponding	1 1.00
	; !		11.00 10.99	Depth to saturated zone Depth to permafrost	11.00 10.99	Depth to saturated zone Depth to permafrost	1.00 0.99
Goldstream	35	IVery limited:		IVery limited:		IVery limited:	
		Depth to permafrostDepth to saturated zone	l1.00 l1.00	Depth to permafrost Ponding	1.00 1.00	Depth to permafrost Ponding	1.00 1.00
	į		11.00	Depth to saturated zone	11.00	Depth to saturated zone	

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of	l landfill [*]		ea sanitary andfill		y cover for andfill	
	lmap lunit I		l (Stan	dard criteria)	l (Stan	dard criteria)	
	i iı	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value
08:			ļ !	1		 	l I
Chena	I	Very limited: Seepage Too Sandy Flooding	1 11.00 11.00 10.40	Very limited: Seepage Flooding 	 1.00 0.40 	Very limited: Too Sandy Seepage Gravel content	 1.00 1.00 1.00
109: Dumps, landfill	 100	 Not rated 	; 	I Not rated	i I I	INot rated	i
I10: Dumps, mine	100	 Not rated 	 	 Not rated	i i	 Not rated	i I
111: Eielson		 Very limited: Flooding Depth to saturated zone Ponding Seepage	 11.00 11.00 11.00 11.00	 Very limited: Flooding Ponding Depth to saturated zone	 1.00 1.00 1.00	 IVery limited: Ponding Depth to saturated zone 	 11.00 11.00
112: Eielson	60 	 Very limited: Flooding Depth to saturated zone	 1.00 1.00	 Very limited: Flooding Ponding	 1.00 1.00		 1.00 1.00
	 	Ponding Seepage	1.00 1.00	Depth to saturated zone	 1.00 		
Piledriver		 Very limited: Depth to saturated	 1.00	 Very limited: Ponding	 1.00	 Very limited: Ponding	11.00
		zone Ponding 	11.00	Depth to saturated	11.00	Depth to saturated	11.00
		Seepage Too Sandy Flooding	1.00 1.00 0.40	Seepage Flooding 	1.00 0.40 	Too Sandy Seepage Gravel content	11.00 11.00 10.16
113: Eielson	 	 Very limited: Flooding Depth to saturated	 1.00 1.00	 IVery limited: Flooding Ponding	 1.00 1.00	 IVery limited: Ponding Depth to saturated	 1.00 1.00
		l zone l Ponding l	 1.00 	Depth to saturated zone	 1.00 	zone 	!
Tanana	35	Seepage Very limited: Depth to saturated	1.00 1.00	 Very limited: Ponding	 1.00	 Very limited: Ponding	 1.00
	İ	zone Ponding	11.00	Depth to saturated	11.00	Depth to saturated	11.00
		Depth to permafrost Flooding	10.86 10.40	zone Depth to permafrost Flooding	10.86 10.40	zone Depth to permafrost 	10.86 1
114: Ester	 	 Very limited: Depth to permafrost Depth to saturated	 1.00 1.00		 1.00 1.00	 Very limited: Depth to permafrost Depth to bedrock	 1.00 1.00
		l zone l Slope l	 1.00 	Depth to saturated zone	 1.00 	Slope	1 1.00
	; 	Depth to bedrock	1.00 1.00	Depth to bedrock	1.00 	Depth to saturated zone	1.00 1.00
		Content of organic matter	 	1 		Seepage 	

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct. I of Imap	l landfill		a sanitary Indfill		y cover for andfill	
	lunit		l (Stan	dard criteria)	l (Stan	dard criteria)	
	i !	Rating class and limiting features	Value Value 	Rating class and limiting features	Value 	Rating class and limiting features	Value
115: Ester	 . 75 	Depth to saturated	 1.00 1.00	 	 1.00 1.00		 1.00 1.00
	 	Ι ΄	1.00 1.00	Depth to saturated zone Depth to bedrock	1.00 1.00	Slope Depth to saturated zone	1.00 1.00
	i 	•	1.00 	 			1.00
116: Fairbanks	i .1 80 1	 Not limited 	 	 Not limited 	 	 Not limited 	
117: Fairbanks	 . 80 	 Somewhat limited: Slope 	 0.16 	 Somewhat limited: Slope 	 0.16 	 Somewhat limited: Slope 	 0.16
118: Fairbanks	 . 70 		 1.00 	 Very limited: Slope 	 1.00 	 Very limited: Slope 	 1.00
119: Fairbanks	 . 80 	 Very limited: Slope 	 1.00 	 Very limited: Slope 	 1.00 	 Very limited: Slope	 1.00
120: Fairbanks	 . 85 		 1.00 	 Very limited: Slope 	 1.00 	I IVery limited: I Slope I	 1.00
121: Fairbanks, strongly sloping	 60 		 0.16	 Somewhat limited: Slope	 0.16	 Somewhat limited: Slope	 0.16
Fairbanks, steep	. i 30 I I		 1.00 	Very limited: Slope	 1.00 	IVery limited: I Slope	 1.00
122: Fairbanks	 . 55 	 Very limited: Slope	 1.00	 Very limited: Slope	 1.00	 Very limited: Slope	 1.00
Steese	. 30 	Seepage	 1.00 1.00 1.00	Very limited: Seepage Depth to bedrock Slope	 1.00 1.00 1.00	•	 1.00 1.00
123: Fairbanks	 . 40 		 1.00 	 Very limited: Slope	 1.00 	 Very limited: Slope 	 1.00
Steese	. I 30 I I I	Depth to bedrock	 1.00 1.00 1.00	Very limited: I Slope I Seepage I Depth to bedrock	1 11.00 11.00 11.00		 1.00 1.00
124: Fubar	 50 	l Too Sandy	 1.00 1.00 1.00 0.40	 Very limited: Depth to saturated zone Seepage Flooding 	 1.00 1.00 0.40	Seepage	 1.00 1.00 1.00
Piledriver	. 40 	I Seepage I Too Sandy I Flooding	1 11.00 11.00 11.00 11.00 0.40	 Very limited: Ponding Depth to saturated zone Seepage Flooding 	 1.00 1.00 1.00 0.40 	Depth to saturated zone Too Sandy Seepage	 1.00 1.00 1.00 1.00 0.16

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct.	l landfill [*]		a sanitary Indfill		y cover for Indfill	
	lmap lunit		l (Stan	dard criteria)	l (Stan	dard criteria)	
	i	Rating class and limiting features	Value 	Rating class and limiting features	Value Value 	Rating class and limiting features	Value
125: Gilmore	 80 	 Very limited: Depth to bedrock Seepage	 1.00 1.00	I IVery limited: I Seepage I Depth to bedrock	 11.00 11.00	 Very limited: Depth to bedrock Seepage	 1.00 0.52
126: Gilmore		 Very limited: Depth to bedrock Seepage Slope	 	 	 1.00 1.00 0.16	 IVery limited: Depth to bedrock Seepage Slope	1 11.00 10.52 10.16
127: Gilmore	 75 	 Very limited: Depth to bedrock Seepage Slope	 1.00 1.00 1.00	 Very limited: Seepage Depth to bedrock Slope	 	 Very limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
128: Gilmore		 Very limited: Slope Depth to bedrock Seepage	 1.00 1.00 1.00	 Very limited: Slope Seepage Depth to bedrock	 11.00 11.00	 Very limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
129: Gilmore	 	 Very limited: Slope Depth to bedrock Seepage	 	 IVery limited: Slope Seepage Depth to bedrock	 	 IVery limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
130: Gilmore	 	 Very limited: Slope Depth to bedrock Seepage	 1.00 1.00 1.00	 IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	 Very limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
131: Gilmore	40 	 Very limited: Depth to bedrock Seepage Slope	 1.00 1.00 1.00	 Very limited: Seepage Depth to bedrock Slope	 11.00 11.00	 Very limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
Ester	40 	 Very limited: Depth to permafrost Depth to saturated zone	 1.00 1.00		 1.00 1.00	Very limited: Depth to permafrost Depth to bedrock	 1.00 1.00
	i ! !	Slope Depth to bedrock 	 1.00 	Depth to saturated zone Depth to bedrock	1.00 1.00	Slope 	1.00 1.00
100.		Content of organic matter 	1.00 	 	 	Seepage 	1.00
132: Gilmore	65 	 Very limited: Depth to bedrock Seepage	 1.00 1.00	 Very limited: Seepage Depth to bedrock	 1.00 1.00	Very limited: Depth to bedrock Seepage	1 11.00 10.52
Steese		 Very limited: Depth to bedrock Seepage 	 1.00 1.00	 Very limited: Seepage Depth to bedrock 	 1.00 1.00 	 Very limited: Depth to bedrock 	 1.00
133:	I	<u>.</u>	1		1	L	1
Goldstream	80 	Very limited: Depth to permafrost Depth to saturated zone	 1.00 1.00 	Very limited: Depth to permafrost Ponding	 1.00 1.00 	Very limited: Depth to permafrost Ponding	 1.00 1.00
	İ	Ponding	1.00	Depth to saturated zone	11.00	Depth to saturated	11.00 I

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct.	l landfill		ea sanitary andfill		ly cover for andfill	
	lmap lunit		ı I (Star	ndard criteria)	l (Stan	ndard criteria)	
	 -	Rating class and limiting features	 Value 	Rating class and limiting features L	Value	Rating class and limiting features I	Value
134:		 	 		1		
Goldstream	80 	Depth to saturated zone	l 1.00 1.00 1.00 	Very limited: Depth to permafrost Ponding Depth to saturated zone	1 1.00 1.00 1.00	Very limited: Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00
135: Goldstream		 Very limited:		 Vary limited:	I	 Von/limited:	1
Goldstream	 	Depth to permafrost Depth to saturated zone	 1.00 1.00 1.00	Very limited: Depth to permafrost Ponding Depth to saturated zone	11.00 11.00 11.00		1.00 1.00 1.00
Histels	45 	Depth to saturated zone Ponding	 1.00 1.00 1.00 1.00	Very limited: Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00		 1.00 1.00 1.00 1.00
136: Histels	 90 	I Depth to saturated zone			 1.00 1.00		 1.00 1.00
			1.00 1.00 	Depth to saturated zone	1.00 	Depth to saturated zone Content of organic matter	11.00 1.00
137: Jarvis	l 75	 Very limited:	l I	 Very limited:	İ	 Very limited:	İ
out vio			1.00	Ponding	1.00	Ponding	1.00
	į	l Ponding	1.00 	Depth to saturated zone	1.00	Depth to saturated	1.00
		l Too Sandy	11.00 11.00 10.40	Seepage Flooding 	11.00 10.40		11.00 11.00 10.66
138:			! 		į		!
Jarvis	55 	•	 1.00	Very limited: Ponding	11.00	Very limited: Ponding	11.00
	į	l zone l Ponding	11.00	Depth to saturated	1.00	Depth to saturated	1.00
			 1.00 1.00	I zone I Seepage I Flooding	1 11.00 10.40	I zone I Too Sandy I Seepage	11.00 11.00
	l	Flooding	10.40 I		l I	Gravel content	10.66 I
Chena	35 	l Too Sandy	 1.00 1.00 0.40	Very limited: Seepage Flooding	 1.00 0.40 	IVery limited: I Too Sandy I Seepage I Gravel content	 1.00 1.00 1.00
139:		 	 	I I		I I	
Jarvis	45 	Very limited: Depth to saturated zone Ponding	 1.00 1.00	Very limited: Ponding Depth to saturated zone	1 1.00 1.00	Very limited: Ponding Depth to saturated zone	1 1.00 1.00
		Seepage Too Sandy	1.00 1.00 0.40	Seepage Flooding 	1.00 0.40 	I Too Sandy I Seepage I Gravel content	1.00 1.00 0.66
Salchaket	45 	Depth to saturated	 1.00 		 1.00 	 Very limited: Ponding	 1.00
	 	l Ponding l Seepage l Too Sandy	1.00 1.00 1.00 1.00 0.40	Depth to saturated zone Flooding	1.00 0.40 	Depth to saturated zone Too Sandy Seepage	11.00 11.00 11.00

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	I IPct. I of	l landfill		ea sanitary andfill		y cover for andfill	
	lmap lunit		l (Stan	dard criteria)	l (Stan	dard criteria)	
	; ! !!	Rating class and limiting features	Value I 	Rating class and limiting features	Value	Rating class and limiting features	Value
140:	 	 	1	1	 	1	I I
Lemeta	75 	Very limited: Depth to permafrost Depth to saturated	 1.00 1.00	Very limited: Depth to permafrost Ponding	 1.00 1.00	IVery limited: Depth to permafrost Ponding	 1.00 1.00
		l zone l Ponding	11.00	Depth to saturated zone	11.00	Depth to saturated zone	11.00
	į	Content of organic matter	1.00	Flooding	10.40	I Seepage	11.00
		Flooding	0.40	 		Content of organic matter	11.00
141: Liscum	¦ 50	i Very limited:		 Very limited:	i	 Very limited:	į
	İ	Depth to saturated	11.00 I	l Ponding	1.00 	l Ponding	11.00 I
	i	l Ponding	11.00 I	Depth to saturated zone	1.00 	Depth to saturated zone	11.00 I
	İ	Seepage Flooding	11.00 10.40	Flooding	10.40 1	i I	İ
Noonku	 45	l IVery limited:	 	l Very limited:	l I	l Very limited:	
	 	Flooding Depth to saturated	1.00 1.00	Flooding Ponding	1.00 1.00	PondingDepth to saturated	1.00 1.00
	 	l zone l Ponding	l l1.00	Depth to saturated	l l1.00	zone	l I
	!	l I Seepage	 1.00	zone	!	! !	!
142:		 	!			 	
Minto	80 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00
143: Minto	 70	ı Very limited:		I Very limited:		 Very limited:	
William .	 	Depth to saturated zone	11.00 	Depth to saturated zone	 1.00 	Depth to saturated zone	11.00
144:		 		1		1	!
Minto	60 	Very limited: Depth to saturated	11.00	Very limited: Depth to saturated	11.00	Very limited: Depth to saturated	11.00
		l zone l Slope	10.04	I zone I Slope	10.04	I zone I Slope	10.04
145: Minto	145	ı Very limited:		 Very limited:		 Very limited:	į
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	11.00
Chatanika	40	l Very limited:		 Very limited:		 Very limited:	
		Depth to saturated zone	11.00	Ponding	11.00	Ponding	11.00
		Ponding Donth to normafront	11.00	Depth to saturated zone	1.00 0.00	Depth to saturated zone	11.00
146:	į	Depth to permafrost	10.99 	Depth to permafrost	0.99 	Depth to permafrost	10.99
Minto	 40 	lVery limited: Depth to saturated zone	 1.00 		 1.00 		 1.00
Chatanika	35	 Very limited:	1	 Very limited:	1	 Very limited:	I I
	 	Depth to saturated	1.00 	Ponding	1.00 	Ponding	1.00
	 	Ponding	1.00 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	[Depth to permafrost	10.99 1	Depth to permafrost	10.99 1	Depth to permafrost	10.99 1

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct. I of Imap	l landfill I	l la	a sanitary ndfill	l la	y cover for Indfill	
	lunit I	l (Standard criteria)	l (Stan	dard criteria)	l (Stan	dard criteria)	
	i !	Rating class and limiting features	Value 	Rating class and limiting features	Value 	Rating class and limiting features	Value
147:		 		 		 	l l
Minto	45 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00
	l I	l Slope I	10.04 1	Slope	10.04 1	Slope	10.04 1
Chatanika	40 	Very limited: Depth to saturated zone	 1.00 	IVery limited: I Ponding	l l1.00	IVery limited: I Ponding	 1.00
	į	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated	1.00
		Depth to permafrost Slope	10.99 10.04	Depth to permafrost Slope	10.99 10.04	Depth to permafrost Slope	10.99 10.04
148:	i	 	i	 	i	İ	i
Minto	45 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00
	l I	l Slope	11.00	Slope	11.00	Slope	1.00
Chatanika		 Very limited: Depth to saturated zone	11.00		11.00		11.00
		Ponding	1.00	Depth to saturated	1.00	Depth to saturated	1.00
		Depth to permafrost Slope	10.99 10.63	zone Depth to permafrost Slope	10.99 10.63	zone Depth to permafrost Slope	10.99 10.63
149:	 	 		 	i	I I	
Mosquito	85 	Very limited: Depth to saturated zone	 1.00 	Very limited: Ponding 	 1.00 	Very limited: Ponding	 1.00
	į	Ponding	11.00	Depth to saturated zone	11.00	Depth to saturated	11.00
	į	l Content of organic	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	l Flooding	0.40	Content of organic matter	11.00
		l Flooding l	10.40 1	 	l I	Depth to permafrost	10.92 1
150: Mosquito	 45 	 Very limited: Depth to saturated	 1.00	 Very limited: Ponding	 1.00	I IVery limited: I Ponding	 1.00
		l zone l Ponding	l l1.00	Depth to saturated	 1.00	Depth to saturated	l l1.00
		Content of organic	l l1.00	zone Depth to permafrost	l 10.92	I zone I Seepage	l l1.00
	 	matter Depth to permafrost	l 10.92	Flooding	l l0.40	Content of organic	l l1.00
	i I	 	10.40	l I	i I	matter Depth to permafrost	l 10.92
Noonku	 40	l IVery limited:	1	 Very limited:	I	l IVery limited:	I
1100 ma		Flooding Depth to saturated	 1.00 1.00	Flooding Ponding	11.00 11.00	Ponding Depth to saturated	 1.00 1.00
		zone Ponding	11.00	 Depth to saturated zone	11.00	zone	
	İ	Seepage 	11.00 1.00			 -	i
151: Noonku	 80	l Very limited:	į	 Very limited:		 Very limited:	į
INOUIRU	60 	Flooding Depth to saturated zone	 1.00 1.00	Flooding Ponding	 1.00 1.00	Ponding Depth to saturated zone	 1.00 1.00
		Ponding Seepage	 1.00 1.00	Depth to saturated zone	 1.00 		

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct.	l landfill ,		a sanitary ndfill		y cover for andfill	
	lmap lunit I		l (Stan	dard criteria)	l (Stan	dard criteria)	
	i	Rating class and limiting features	Value 	Rating class and I limiting features	Value	Rating class and limiting features	Value
152:	I] 	i I	I I		i I	i
North Pole	85	Very limited:	1	Very limited:	1	Very limited:	
	l I	Depth to saturated	11.00	l Ponding	11.00	l Ponding	11.00
	i	Ponding	11.00	Depth to saturated	11.00	Depth to saturated	11.00
	!			zone		zone	
	l I	l Seepage l Too Sandy	1.00 1.00	Seepage Flooding	1.00 0.40	I Too Sandy I Seepage	1.00 1.00
	i	l Flooding	10.40		ĺ	Gravel content	10.01
150.	l I	 -	1	1	ļ .		
53: North Pole	l 50	। IVery limited:	i	IVery limited:	i	Very limited:	i
	İ	Depth to saturated	11.00	l Ponding	11.00	l Ponding	11.00
	l	l zone l Ponding	l l1.00	Depth to saturated		Donth to coturated	 1.00
	i	l Ponding	11.00	zone	1.00 	Depth to saturated zone	11.00
	İ	Seepage	11.00	I Seepage	11.00	l Too Sandy	11.00
		Too Sandy Flooding	1.00 0.40	Flooding	10.40	Seepage Gravel content	11.00 10.01
	i		10.40	1	i	Graver content	
Mosquito	30	Very limited:	1	IVery limited:	1	Very limited:	1
	l	Depth to saturated zone	11.00	l Ponding	11.00	l Ponding	11.00
	i	Ponding	11.00	Depth to saturated	11.00	Depth to saturated	1.00
	1	I	1	l zone	1	l zone	1
	l I	Content of organic matter	11.00	Depth to permafrost	10.92	Seepage	11.00
	i	Depth to permafrost	10.92	l Flooding	0.40	Content of organic	1.00
	l l	l i	1	!	Į.	l matter	
	l I	l Flooding I	10.40 1	 		Depth to permafrost	10.92
Liscum	20	Very limited:	i	Very limited:	i	Very limited:	i
	!	Depth to saturated	11.00	Ponding	11.00	Ponding	11.00
	l I	l zone l Ponding	l 1.00	Depth to saturated	11.00	Depth to saturated	11.00
	i	 	1	l zone	I	zone	1
	l	Seepage	11.00	Flooding	10.40		
	i	l Flooding I	10.40 1	 		1	i
154:	İ	ĺ	İ	İ	İ	İ	İ
North Pole	55	Very limited: Depth to saturated	l l1.00	Very limited: Ponding	l l1.00	IVery limited: I Ponding	l l1.00
	i	zone	11.00	Orlaing			
	l l	Ponding	11.00	Depth to saturated	11.00	Depth to saturated	11.00
	l I	l I Seepage	l 1.00	l zone l Seepage	l 1.00	I zone I Too Sandy	l 1.00
	i	Too Sandy	11.00	Flooding	10.40	Seepage	11.00
	!	Flooding	10.40	I	ļ.	Gravel content	10.01
Noonku	l 125	। IVery limited:	i	 Very limited:	i i	Very limited:	-
		l Flooding	i 11.00	l Flooding	11.00	l Ponding	11.00
	l I	Depth to saturated	11.00	Ponding	11.00	Depth to saturated	1.00
	i	l zone l Ponding	11.00	Depth to saturated	11.00	zone	i
	į	I	1	zone		!	į
	l	l Seepage	11.00	 			
155:			i	İ	i	i	i
Peede	85	Very limited:		IVery limited:		IVery limited:	
		Flooding Depth to saturated	1.00 1.00	Flooding Ponding	1.00 1.00	Ponding Depth to saturated	1.00 1.00
	i	zone	1			zone	
		l Ponding	11.00	Depth to saturated	11.00		I
	!] 	1	zone	!	1	1

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct.	l landfill		ea sanitary andfill		y cover for andfill	
	lmap lunit		l (Stan	dard criteria)	l (Star	ndard criteria)	
	i	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
156:	; 	 	' 	 			
Peede	70	Very limited:	1	IVery limited:	I	IVery limited:	1
		Flooding Depth to saturated zone	1.00 1.00	Flooding Ponding	1.00 1.00	Ponding Depth to saturated zone	1.00 1.00
		Ponding	1.00	Depth to saturated zone	11.00		
Mosquito	1 25	IVery limited:	1	IVery limited:	-	IVery limited:	-
wosquito	 	Depth to saturated	11.00 1	Ponding	1.00	Ponding	11.00 I
	 	l Ponding	1.00 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	!	Content of organic	11.00	Depth to permafrost	10.92	Seepage	11.00
	į	I matter I Depth to permafrost I	1 10.92 1	l Flooding	1 10.40 1	Content of organic matter	11.00
	İ	l Flooding	10.40 1	 	1	Depth to permafrost	10.92 1
157:		 		None Beritanda	ļ.	 	1
Piledriver	75 	Very limited: Depth to saturated zone	1 1.00 	IVery limited: Ponding	11.00	Very limited: Ponding	11.00
	i I	l Ponding	l1.00	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	ļ	Seepage	11.00	Seepage	11.00	Too Sandy	11.00
	i	Too Sandy Flooding 	1.00 0.40 	Flooding 	0.40 	Seepage Gravel content	11.00 10.16 1
158:	j 		į	 	į	None Beritand	į
Piledriver	50 	Very limited: Depth to saturated zone	1 1.00 	IVery limited: I Ponding	11.00	Very limited: Ponding	11.00
	į	l Ponding	 1.00 	Depth to saturated zone	11.00 I	Depth to saturated zone	11.00 I
	!	Seepage	11.00	Seepage	11.00	Too Sandy	11.00
		Too Sandy Flooding	11.00 10.40	Flooding 	0.40 	Seepage Gravel content	11.00 10.16
Eielson	35	Very limited:	i	Very limited:	i	Very limited:	i
	!	l Flooding	11.00	Flooding	11.00	l Ponding	11.00
	l I	Depth to saturated zone	1.00 	l Ponding	l1.00 l	Depth to saturated zone	1.00
	l I	l Ponding l	1.00 	Depth to saturated zone	1.00 		l I
		Seepage	1.00] !			ļ
159: Piledriver	ا ا 50	l Very limited:		 Very limited:		IVery limited:	I
i lieuriver		Depth to saturated zone	1.00 1	Ponding	11.00	Ponding	11.00
		l Ponding l	1.00 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	ļ.	Seepage	11.00	Seepage	11.00	Too Sandy	11.00
		Too Sandy Flooding 	11.00 10.40	Flooding 	0.40 	Seepage Gravel content	11.00 10.16
Fubar	40	 Very limited: Depth to saturated	 1.00	 Very limited: Depth to saturated	 1.00		 1.00
	Į.	l zone		zone		Coons	
	 	Seepage Too Sandy Flooding	1.00 1.00 0.40	Seepage Flooding 	1.00 0.40 	Seepage Gravel content 	1.00 1.00
160:	ļ 	l I	1	 		 	
Pits, gravel	100 	INOT rated		Not rated 	 	Not rated	

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct. I of Imap	l landfill [*]		ea sanitary andfill		y cover for andfill	
	lunit		l (Star	ndard criteria)	l (Star	ndard criteria)	
		Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value
161: Pits, quarry		 Not rated	 	I I INot rated	 	I I INot rated	
162:	ļ		į		į		į
Riverwash	 100	। Not rated 	i			 Not rated 	
163: Salchaket	85 	 Very limited: Depth to saturated	11.00	 Very limited: Ponding	11.00	l IVery limited: I Ponding	11.00
	ļ	l zone l Ponding	11.00	Depth to saturated	11.00	Depth to saturated	11.00
		l Seepage l Too Sandy l Flooding	11.00 11.00 10.40	zone Flooding 	10.40 1 1	I zone I Too Sandy I Seepage I	 1.00 1.00
164: Salchaket		 Very limited:	i I I1.00	 Very limited:		 Very limited:	i I I1.00
	į	Depth to saturated zone	1	Ponding	1.00 	Ponding	1
		l Ponding l	1.00 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00
		Seepage Too Sandy Flooding	1.00 1.00 0.40	Flooding 	0.40 	I Too Sandy I Seepage I	1.00 1.00
Typic Cryorthents	40 	I IVery limited: I Seepage I Flooding	1 1 11.00 10.40		1 1 11.00 10.40	 Very limited: Seepage 	 1.00
165:	l I	 	1	1	I	1	l I
Saulich	i 80 	 Very limited: Depth to saturated zone	i 1.00	IVery limited: Ponding	 1.00	IVery limited: I Ponding	 1.00
	į	Ponding	1.00	Depth to saturated zone	11.00	Depth to saturated	11.00
	į	l Content of organic	1.00	Depth to permafrost	0.99	Seepage	11.00
		Depth to permafrost	10.99 	! 		Content of organic matter	11.00
166:	 	 		 	 	Depth to permafrost	10.99 1
Saulich	80	 Very limited: Depth to saturated	1.00		11.00		1.00
	į	l zone l Ponding	1.00	Depth to saturated	11.00	Depth to saturated	11.00
	!	Content of organic	 1.00	zone Depth to permafrost	 0.99	I zone I Seepage	11.00
	ļ	I matter I Depth to permafrost	10.99	l Slope	l 0.16	Content of organic	11.00
		ı I Slope I	1 10.16 1	! ! !		matter Depth to permafrost	1 10.99
167: Saulich	75 	 Very limited: Depth to saturated	 1.00	IVery limited: I Ponding	 1.00	IVery limited: I Ponding	 1.00
		l zone l Ponding	11.00	Depth to saturated	11.00	Depth to saturated	11.00
		Content of organic	11.00	I zone I Slope	11.00	I zone I Seepage	11.00
		I matter I Slope I	 1.00 	Depth to permafrost	1 10.99 1	Content of organic matter	1 1.00
	I	Depth to permafrost	10.99	 	I	Slope	11.00

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	IPct.	l landfill		ea sanitary andfill		y cover for andfill	
	lmap lunit		l (Star	ndard criteria)	l (Stan	dard criteria)	
	i i	Rating class and limiting features	Value 	Rating class and I limiting features	Value	Rating class and limiting features	Value
168:		 	1			I I	
Saulich	40 	Very limited: Depth to saturated zone	 1.00	Very limited: Ponding	 1.00	IVery limited: I Ponding	 1.00
	į	Ponding	1.00	Depth to saturated zone	11.00	Depth to saturated zone	1.00
	i	Content of organic matter	11.00 I	Depth to permafrost	0.99	Seepage	11.00
	 	Depth to permafrost	10.99 	i 	 	Content of organic matter Depth to permafrost	11.00 1 10.99
Minto	40		 1.00		 1.00	IVery limited: Depth to saturated	 1.00
		zone Slope	10.04	zone Slope	10.04	zone Slope	10.04
169:	į	 	10.04	 		 	
Saulich	40	Very limited: Depth to saturated zone	11.00	 Very limited: Ponding	 1.00	 Very limited: Ponding	11.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	į	Content of organic matter	1.00	I Slope	11.00	l Seepage	1.00
	i	Slope	11.00	Depth to permafrost	0.99	Content of organic matter	1.00
	i	Depth to permafrost	i0.99	i I	į	Slope	11.00
Minto	35 	Very limited: Depth to saturated zone	 1.00 	IVery limited: Depth to saturated zone	 1.00 	IVery limited: Depth to saturated zone	 1.00
	İ	I Slope	11.00 I	I Slope	1.00 	I Slope	1.00
170: Steese	। । 80	l IVery limited:	1	l IVery limited:		l IVery limited:	
	 	I Depth to bedrock I Seepage I	1.00 1.00 	Seepage Depth to bedrock 	1.00 1.00 	Depth to bedrock	1.00
171: Steese	। । 80	 Very limited:	 	l Very limited:		l Very limited:	
		Depth to bedrock Seepage Slope	1.00 1.00 0.16	Seepage Depth to bedrock Slope	1.00 1.00 0.16	Depth to bedrock Slope 	1.00 0.16
172: Steese		 		 Very limited:		 Very limited:	
Sieese	 	Depth to bedrock Seepage Slope	 1.00 1.00 1.00	Seepage Depth to bedrock Slope	11.00 11.00 11.00	Depth to bedrock Slope	 1.00 1.00
173: Steese	 75	 Very limited:		 Very limited:		 Very limited:	
	 	Slope Depth to bedrock Seepage	1.00 1.00 1.00	Slope Seepage Depth to bedrock	11.00 11.00 11.00	Depth to bedrock	1.00 1.00
174: Steese	i l 85	 Very limited:	i i	l Very limited:	i	IVery limited:	i I
	 	I Slope I Depth to bedrock I Seepage	1.00 1.00 1.00	Slope Seepage Depth to bedrock	1.00 1.00 1.00 	Depth to bedrock Slope 	1.00 1.00
175: Steese	 90	 Very limited: Slope	 1.00	 Very limited: Slope	 1.00	 Very limited: Depth to bedrock	 1.00
	 	Depth to bedrock Seepage	11.00 1.00 1.00	Seepage Depth to bedrock	11.00 1.00 1.00	Slope	1.00 1.00

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map	l landfill ,		ea sanitary andfill		y cover for andfill	
	lunit		l (Stan	ndard criteria)	l (Stan	dard criteria)	
		Rating class and limiting features	 Value 	Rating class and I limiting features	Value 	Rating class and limiting features	Value
176:		 	 	1		I I	
Steese	55 	l Seepage	 1.00 1.00 1.00	Very limited: Seepage Depth to bedrock Slope	 1.00 1.00 1.00	Very limited: Depth to bedrock Slope	 1.00 1.00
Gilmore		Seepage	1 		1 1.00 1.00 1.00	Very limited: Depth to bedrock Slope Seepage	1 11.00 11.00 10.52
77: Steese	i 50 	Depth to bedrock	 		 1.00 1.00 1.00		 1.00 1.00
Gilmore	40 	Depth to bedrock	 		 1.00 1.00 1.00	Very limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
78: Steese	50 	Depth to bedrock	 1.00 1.00 1.00		 1.00 1.00 1.00	 Very limited: Depth to bedrock Slope	 1.00 1.00
Gilmore	40 	Depth to bedrock	 		 	IVery limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
179: Steese	45 	Depth to bedrock	1 1.00 1.00		 1.00 1.00	 IVery limited: Depth to bedrock Slope 	 1.00 1.00
Gilmore	 45 	Depth to bedrock	 		 		 1.00 1.00 0.52
80: Tanacross		Depth to saturated zone Ponding	 		 11.00 11.00 11.00 0.40		 1.00 1.00 1.00
181: Tanana	1	Depth to permafrost	 		1 11.00 11.00 10.86 10.40		 1.00 1.00 1.00 0.86

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	I IPct. I of Imap	l landfill		ea sanitary andfill		y cover for Indfill	
	lunit		l (Stan	dard criteria)	l (Stan	dard criteria)	
	 	Rating class and limiting features	 Value 	Rating class and limiting features	Value	Rating class and limiting features	Value
182:		 	 	I I		 	
Tanana	60 	Depth to permafrost	 1.00 1.00 0.86 0.40	Very limited: Ponding Depth to saturated zone Depth to permafrost Depth to permafrost	 11.00 11.00 0.86 0.40	I Depth to saturated zone	 1.00 1.00 0.86
Mosquito		Content of organic matter Depth to permafrost	 1.00 1.00 1.00 0.92 	Very limited: Ponding Depth to saturated zone Depth to permafrost Flooding	11.00 11.00 10.92 1 10.40	Depth to saturated zone Seepage Content of organic matter	 1.00 1.00 1.00 1.00 1.00
183:	į			i I	į		
Typic Cryaquents			 1.00 1.00 	 Very limited: Flooding Ponding 	 1.00 1.00 	•	 1.00 1.00
		Ponding 	1.00 	Depth to saturated zone	1.00 	 	
Histic Cryaquepts	25 	 Very limited: Depth to saturated zone	 1.00	 Very limited: Ponding	11.00	 Very limited: Ponding	 1.00
	İ		 1.00 	Depth to saturated zone	 1.00 	Depth to saturated zone	11.00
Terric Cryofibrists			 1.00 		 1.00 	IVery limited: I Ponding	 1.00
	 	ı	1.00 0.50	Depth to saturated zone Seepage	1.00 1.00	l zone	1.00 0.50
184: Typic Cryorthents		l Too Sandy	 1.00 1.00 0.40	 Somewhat limited: Flooding 	 0.40 	 Very limited: Too Sandy 	 1.00
185:		 	! 			 	
Typic Cryorthents, fill	45 	Seepage	l 1.00 0.40 	Very limited: Seepage Flooding	 1.00 0.40	Very limited: Seepage 	 1.00
Urban land	45	INot rated	 	 Not rated	į	 Not rated 	i i
186: Urban land	100	 Not rated 	 	 Not rated 		 Not rated 	
187: Water		l INot rated I	 	 INot rated		 INot rated	

Table 18. Construction Materials: Gravel and Sand

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map	Potential source of gravel	Pote	ntial source of sand	
	l unit	(Alaska criteria)	i (Ala	ska criteria)	
		Rating class and limiting features	 Value 	Rating class and limiting features	Value
101: Bolio	 75 	I Improbable: I Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00	I Improbable: I Organic soil Bottom layer not a source Depth to permafrost	1 1 10.00 10.00 10.00
102: Bradway	 85 		 0.00 0.21 	Improbable: I Bottom layer not a source No permafrost depth I limitation	 0.00 0.21
103: Chatanika	 		 0.00 0.01 	Ilmprobable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
104: Chatanika	 		 0.00 0.01 	Ilmprobable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
105: Chatanika	 80 		 0.00 0.01 	Ilmprobable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
106: Chatanika	 80 		 0.00 0.01	Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
107: Chatanika	 55 		 0.00 0.01	I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
Goldstream	35 	Ilmprobable: I Bottom layer not a source No permafrost depth I limitation	 0.00 0.00 	Ilmprobable: I Bottom layer not a source No permafrost depth I limitation	1 10.00 10.00 1
108: Chena	90 	 Gravel source	 	 Sand source 	
109: Dumps, landfill	i 100	 Not rated	i !	 Not rated	i I
110: Dumps, mine	100	 Not rated	!	 Not rated	
111: Eielson	 80 	I IGravel source	 	I IImprobable: I Bottom layer not a source	10.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	 Pct. of map unit	I Potential source of I gravel I (Alaska criteria)		ntial source of sand ska criteria)	
	 	I I Rating class and I limiting features	l Value 	Rating class and I limiting features	IValue I
112: Eielson	 60 	 	 	 	 0.00
Piledriver	l 30	IGravel source	i I	ISand source	İ
113: Eielson	 50 	 Gravel source 		 Improbable: Bottom layer not a source	 0.00
Tanana	 35 	Illmprobable: Bottom layer not a source No permafrost depth Iimitation	 0.00 0.14 	Illmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.14
114: Ester	 70 	 Improbable: Bottom layer not a source Depth to permafrost 	 0.00 0.00 	l Ilmprobable: Bottom layer not a source Depth to permafrost 	 0.00 0.00
115: Ester	 75 	 Improbable: Bottom layer not a source Depth to permafrost 	 0.00 0.00	 Improbable: Bottom layer not a source Depth to permafrost 	 0.00 0.00
116: Fairbanks	 80 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00
117: Fairbanks	 80 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00
118: Fairbanks	 70 	 Improbable: Bottom layer not a source 	 0.00 	l Ilmprobable: Bottom layer not a source 	 0.00
119: Fairbanks	 80 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00
120: Fairbanks	 85 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00
121: Fairbanks, strongly sloping	1	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00
Fairbanks, steep	l 30 I	Ilmprobable: Bottom layer not a source	I I0.00	Improbable: Bottom layer not a source	l l0.00
122: Fairbanks	 55 	I IImprobable: I Bottom layer not a source	 0.00	 	 0.00
Steese	30 	Ilmprobable: Bottom layer not a source	 0.00 	Ilmprobable: I Bottom layer not a source	 0.00
123: Fairbanks	 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00
Steese	30 	Improbable: Bottom layer not a source 	 0.00 	Improbable: Bottom layer not a source 	 0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	l Pct. I of I map	Potential source of gravel	l Pote	ntial source of sand	
	l unit	l (Alaska criteria)	l (Ala	ska criteria)	
	 	Rating class and limiting features	Value 	Rating class and limiting features	Value
24: Fubar	 50	I I IGravel source	 	 Sand source	İ
Piledriver	140	 Gravel source	İ	 Sand source	İ
			į		į
25: Gilmore		Ilmprobable: I Bottom layer not a I source	 0.00 	Ilmprobable: I Bottom layer not a I source	 0.00
26: Gilmore	 70	I IImprobable: I Bottom layer not a source	10.00	I IImprobable: I Bottom layer not a source	10.00
27: Gilmore		I Ilmprobable: I Bottom layer not a source	 0.00	 	10.00
28: Gilmore		 	 0.00	 Ilmprobable: Bottom layer not a source	 0.00
29: Gilmore		 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	i I I0.00
30: Gilmore		 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	i I I0.00
31: Gilmore	40 	 Improbable: Bottom layer not a source	10.00	 Improbable: Bottom layer not a source	i I I0.00
Ester		Ilmprobable: Bottom layer not a source Depth to permafrost	 0.00 0.00	Ilmprobable: Bottom layer not a source Depth to permafrost	 0.00 0.00
32: Gilmore		 Improbable: Bottom layer not a source	10.00	 Ilmprobable: Bottom layer not a source	10.00
Steese		IImprobable: Bottom layer not a source	 0.00 	Ilmprobable: Bottom layer not a source	 0.00
33: Goldstream	 80 	Ilmprobable:	 0.00 0.00 	IImprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.00
34: Goldstream	 80 	Improbable: I Bottom layer not a source I No permafrost depth I imitation	 0.00 0.00 	Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.00
35: Goldstream		I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.00	I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.00
Histels	 45 	IImprobable: Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00	IImprobable: Organic soil Bottom layer not a source Depth to permafrost	1 10.00 10.00 10.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. I of I map	Potential source of gravel	l l	ntial source of sand	
	l unit l	(Alaska criteria)	(Ala:	ska criteria)	
	 	Rating class and limiting features	IValue I I	Rating class and Ilmiting features	IValue I I
136: Histels	 90 	I IImprobable: I Organic soil I Bottom layer not a source I Depth to permafrost	 0.00 0.00	I I I I I I I I I I I I I I I I I I I	 0.00 0.00 0.00
137: Jarvis	 	 Gravel source		 Sand source	
138: Jarvis	 55	 Gravel source	 	I ISand source	
Chena	 35 	 Gravel source 	 	I ISand source	
139: Jarvis	45	 IGravel source	 	 Sand source	
Salchaket	 45 	IGravel source	i i	Sand source	
140: Lemeta	 		 0.00 0.00 0.00	 Improbable: Organic soil Bottom layer not a source No permafrost depth Iimitation	 0.00 0.00 0.00
41: Liscum		 Improbable: Bottom layer not a source	 0.00	I Ilmprobable: I Bottom layer not a source	 0.00
Noonku	 45 	 Gravel source 		 Improbable: Bottom layer not a source	 0.00
142: Minto	 80 	 	 0.00	I Improbable: I Bottom layer not a source	 0.00
143: Minto	 70 	 Improbable: Bottom layer not a source	 0.00	I IImprobable: I Bottom layer not a source	 0.00
44: Minto	 60 	 Improbable: Bottom layer not a source	 0.00 	 Improbable: Bottom layer not a source	 0.00
145: Minto	 45 		 0.00	I IImprobable: I Bottom layer not a source	 0.00
Chatanika		Ilmprobable: Bottom layer not a source No permafrost depth limitation	1 10.00 10.01 1		 0.00 0.01
146: Minto			 0.00	I IImprobable: I Bottom layer not a source	 0.00
Chatanika		Ilmprobable: Bottom layer not a source No permafrost depth Iimitation	 0.00 0.01 	Ilmprobable: I Bottom layer not a source I No permafrost depth I limitation	1 10.00 10.01 1

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct.	Potential source of gravel	l Pote	ntial source of sand	
	map unit	(Alaska criteria)	l (Ala	ska criteria)	
	İ	Rating class and limiting features	IValue	Rating class and limiting features	Value
47: Minto	 45	I Ilmprobable:	 	I I Improbable:	
WIII 160		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Chatanika		Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01
48: Minto	 45	l Ilmprobable:	į	 Improbable:	į
WIII ICO		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Chatanika		Ilmprobable: Bottom layer not a source No permafrost depth limitation	1 10.00 10.01 1	Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01
49: Mosquito	 85 	 Improbable: Bottom layer not a source No permafrost depth limitation	1 10.00 10.08 1	I IImprobable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.08
50: Mosquito	 45 		 0.00 0.08		 0.00 0.08
Noonku	40 	 Gravel source 		I IImprobable: I Bottom layer not a source	1 1 10.00
51: Noonku	 80 	I IGravel source I	 	I Ilmprobable: I Bottom layer not a source	i I I0.00
52: North Pole	 85 	I IGravel source I	 	I IImprobable: I Bottom layer not a source	 0.00
53: North Pole		I IGravel source		 Improbable: Bottom layer not a source	 0.00
Mosquito		Ilmprobable: Bottom layer not a source No permafrost depth limitation	10.00 10.08 1	Ilmprobable: I Bottom layer not a source No permafrost depth I limitation	 0.00 0.08
Liscum	 20 	Ilmprobable: I Bottom layer not a source	 0.00	Improbable: Bottom layer not a source	10.00
54: North Pole	i 1 55 I	 Gravel source 	 	I Ilmprobable: I Bottom layer not a source	i I I0.00
Noonku	 25 	 Gravel source 	 	 Improbable: Bottom layer not a source	 0.00
55: Peede	 85	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. I of I map I unit	Potential source of gravel (Alaska criteria)	1	ntial source of sand ska criteria)	
		Rating class and limiting features	(Ala. 	Rating class and limiting features	Value
	i	_	_ i		_
56:	l I		I		
Peede		Improbable:	10.00	Ilmprobable:	10.00
		Bottom layer not a source	10.00 I	Bottom layer not a source	10.00 I
Mosquito		Ilmprobable: I Bottom layer not a source No permafrost depth I limitation	10.00 10.08 1	Ilmprobable: Bottom layer not a source No permafrost depth limitation	10.00 10.08 1
57: Piledriver	1 75	 Gravel source		I ISand source	
58:	į				
Piledriver	1 50 	Gravel source	l I	Sand source	
Eielson		Gravel source 	 	Ilmprobable: I Bottom layer not a source	1 10.00 1
59: Piledriver		 Gravel source	 	 Sand source	
ubar		 Gravel source		I ISand source	
60: Pits, gravel	 100	 Not rated	į	l Not rated	į
61: Pits, quarry	 100	I I Not rated		I INot rated	
62:	I		I		1
oz: Riverwash	l100	 Not rated 		 Not rated 	İ
63: Salchaket	85	 Gravel source		 Sand source	
64:	i		i		i
Salchaket	45 	IGravel source		Sand source	l
Гуріс Cryorthents		Gravel source	i I	ISand source	i i
65: Saulich	 80 	I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01
66: Saulich	 80 	I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01
67: Saulich	175 	I I IIII IIII IIII IIII IIII IIII IIII IIII	 0.00 0.01 	I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
68: Saulich	 40 	I Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01
Minto		Ilmprobable: I Bottom layer not a source	 0.00	Ilmprobable: Bottom layer not a source	 0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)	l l	ntial source of sand ska criteria)	
	 	Rating class and limiting features	l Value 	Rating class and limiting features	Value
169: Saulich	 40 		 0.00 0.01	Improbable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.01
Minto	 35 	Improbable: Bottom layer not a source	10.00	Ilmprobable: Bottom layer not a source	10.00
170: Steese	 80 	I Ilmprobable: I Bottom layer not a source	 0.00	I Ilmprobable: I Bottom layer not a source	 0.00
71: Steese	 80 		 0.00	I IImprobable: I Bottom layer not a source	 0.00
172: Steese	 70 	 Improbable: Bottom layer not a source	 0.00	I IImprobable: I Bottom layer not a source	 0.00
73: Steese	 75 	I IImprobable: I Bottom layer not a source	 0.00	Improbable: Bottom layer not a source	i I I0.00
74: Steese	 85 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	i I I0.00
175: Steese	 90 	 Improbable: Bottom layer not a source	 0.00	 Ilmprobable: Bottom layer not a source	 0.00
76: Steese	 55 	 Improbable: Bottom layer not a source	10.00	I IImprobable: I Bottom layer not a source	 0.00
Gilmore	 25 	Improbable: I Bottom layer not a source	1 10.00	Ilmprobable: I Bottom layer not a source	10.00
77: Steese	 50 	 Improbable: Bottom layer not a source	 0.00	 Ilmprobable: Bottom layer not a source	 0.00
Gilmore	 40 	Improbable: Bottom layer not a source	 0.00 	Improbable: Bottom layer not a source	 0.00
78: Steese	 50 	 Improbable: Bottom layer not a source	I I I0.00	 Improbable: Bottom layer not a source	 0.00
Gilmore	 40 	Improbable: I Bottom layer not a source	1 1 10.00	Improbable: Bottom layer not a source	1 1 10.00
79: Steese	 45 	 Improbable: Bottom layer not a source	10.00	 Ilmprobable: Bottom layer not a source	 0.00
Gilmore	 45 	 Improbable: Bottom layer not a source	 0.00	I IImprobable: I Bottom layer not a source	 0.00
180: Tanacross	 90 	 	1 1 10.00 10.00	 	 0.00 0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Pct. of map unit	Potential source of gravel (Alaska criteria)	Potential source of sand (Alaska criteria)			
 	Rating class and I limiting features	li Value 	Rating class and I limiting features	Value	
 75 		 0.00 0.14		 0.00 0.14	
 60 	 	 0.00 0.14	 Improbable: Bottom layer not a source No permafrost depth Iimitation	1 1 10.00 10.14	
 20 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08	
 30 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
 25 	I Improbable: I Bottom layer not a source	 0.00	I Improbable: I Bottom layer not a source	 0.00	
 20 	Ilmprobable: I Organic soil I Bottom layer not a source	 0.00 0.00	 Improbable: Organic soil Bottom layer not a source	 0.00 0.00	
 80 	 Gravel source 		 Ilmprobable: Bottom layer not a source	 0.00	
 45 	 Gravel source 	 	 Sand source 	 	
 45 	l Not rated		l Not rated		
 100	 Not rated	İ	 Not rated		
 100	 Not rated	 	I I INot rated		
	l of	of gravel map unit (Alaska criteria)	of	orange	

Table 19. Construction Materials: Topsoil and Roadfill

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
	unit 	Rating class and limiting features	I Value I	Rating class and I limiting features	Value
101: Bolio	 75 	Poor: Depth to saturated zone Content of organic matter Depth to permafrost Too acid	 0.00 0.00 0.00 0.12		 0.00 0.00 0.00
102: Bradway	 85 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.21 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.21
103: Chatanika	 75 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.01 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth	 0.00 0.00 0.01
104: Chatanika	 75 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.01 	Poor: Depth to saturated zone	 0.00 0.00 0.01
105: Chatanika	 80 	Poor: Depth to saturated zone No permafrost depth limitation Slope	 0.00 0.01 0.84	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01
106: Chatanika	 80 	Poor: Depth to saturated zone Slope No permafrost depth limitation	 0.00 0.00 0.01	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01
107: Chatanika	 55 		 0.00 0.01 		 0.00 0.00 0.01
Goldstream	 35 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.00	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00
	i	Too acid	0.18		i

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	 Pct. of map	Potential source of topsoil		Potential source of roadfill			
	l unit	l (Alaska criteria)	İ	(Alaska criteria)			
	i I	Rating class and limiting features	Value	Rating class and I limiting features	l Value		
108: Chena	1 90	Poor: Rock fragment content		 	 		
109: Dumps, landfill	1 100	 Not rated		 Not rated	 		
I10: Dumps, mine	i 100 	l Not rated	i I	i I Not rated I	i		
111: Eielson	 80 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
112: Eielson	 60 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone	 0.00 0.00		
Piledriver	 30 	Poor: Depth to saturated zone 	por: Poor:		 0.00 0.00		
113: Eielson	 50 	 Poor: Depth to saturated zone 	 		 0.00 0.00		
Tanana	 35 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.14 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.14		
114: Ester	 70 	Poor: Slope Depth to saturated zone Content of organic matter Depth to permafrost Depth to bedrock Too acid	 10.00 0.00 0.00 10.00 10.00 0.18	Poor: Poor: Depth to bedrock Depth to saturated zone High frost action (check lower layers) Slope Depth to permafrost	1 0.00 1 0.00 1 0.00 1 0.00 1 0.00		
115: Ester	: 1		 10.00 0.00 0.00 0.00 10.00 0.18	Poor: Depth to bedrock Depth to saturated zone Slope High frost action (check lower layers) Depth to permafrost	 10.00 0.00 0.00 0.00 10.00		
116: Fairbanks	 80 	Good source		 	 0.00 		

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map	Potential source of topsoil	i 	Potential source of roadfill	
	map unit	l (Alaska criteria)		(Alaska criteria)	
		Rating class and limiting features	Value	Rating class and I limiting features	Value
117: Fairbanks	 80 	 	 0.84		 0.00
118: Fairbanks	 70 	I I Poor: I Slope I	 0.00		 0.00
119: Fairbanks	 80 	 Poor: Slope 	 0.00	 Poor: High frost action (check lower layers) Slope	 0.00 0.00
120: Fairbanks	 85 	 Poor: Slope 	 0.00 	 Poor: Slope High frost action (check lower layers)	 0.00 0.00
121: Fairbanks, strongly sloping	 60 	 Fair: Slope 	 0.84	 Poor: High frost action (check lower layers)	 0.00
Fairbanks, steep	 30 	 Poor: Slope 	 0.00 	 Poor: Slope High frost action (check lower layers)	 0.00 0.00
122: Fairbanks	 55 	I I Poor: I Slope I	 0.00	I I Poor: I High frost action I (check lower layers)	 0.00
Steese	 30 	Poor: Slope Depth to bedrock	 0.00 0.79 	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
123: Fairbanks	 40 	 Poor: Slope 	 0.00 	I I Poor: I High frost action I (check lower layers) I Slope	 0.00 0.00
Steese	 30 	Poor: Slope Depth to bedrock 	 0.00 0.79 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
124: Fubar	 50 	 Poor: Rock fragment content	 0.00	I I Good source I	
Piledriver	40 	Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	 Pct. of map	Potential source of topsoil		Potential source of roadfill				
	l unit			 (Alaska criteria)				
	i i	Rating class and limiting features	Value	Rating class and I limiting features	Value			
125: Gilmore	 80 		 0.00 0.00	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50			
126: Gilmore	 70 	Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 0.84	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50 			
127: Gilmore	 75 	Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 0.00	Poor: Depth to bedrock Moderate frost action (check lower layers) Slope	 0.00 0.50 0.98			
128: Gilmore	 70 		 0.00 0.00 0.00	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50			
129: Gilmore	 85 	Poor: Slope Rock fragment content Depth to bedrock	 0.00 0.00 0.00	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50			
130: Gilmore	 85 		 0.00 0.00 0.00	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50			
131: Gilmore	 40 	Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 0.00	Poor: Depth to bedrock Moderate frost action (check lower layers) Slope	 0.00 0.50 0.98			
Ester	 40 	Poor: Slope Depth to saturated zone Content of organic matter Depth to permafrost Depth to bedrock Too acid	 0.00 0.00 0.00 0.00 0.00 0.18	Poor: Depth to bedrock Depth to saturated zone High frost action (check lower layers) Slope Depth to permafrost	 0.00 0.00 0.00 0.00 0.00			
132: Gilmore	 65 		 0.00 0.00		 0.00 0.50			
Steese	 33 	 Fair: Depth to bedrock 	 0.79 	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50 			

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	l Pct. l of l map	Potential source of topsoil	i 	Potential source of roadfill			
	l unit l (Alaska criteria)		(Alaska criteria)				
	i i	Rating class and limiting features	Value	Rating class and I limiting features	Value		
133: Goldstream	 80 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.00 0.18		 0.00 0.00 0.00		
134: Goldstream	 80 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.00	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00		
135: Goldstream	 50 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.00 0.18	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00		
Histels	 45 	Poor: Depth to saturated zone Content of organic matter Depth to permafrost Too acid	 0.00 0.00 0.00 0.18	Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00		
136: Histels	 90 	Poor: Depth to saturated zone Content of organic matter Depth to permafrost Too acid	 0.00 0.00 0.00 0.18	Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00		
137: Jarvis	 75 	 Poor: Depth to saturated zone 	 0.00 		 0.00 0.50		
138: Jarvis	 55 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50		
Chena	 35 	Poor: Rock fragment content	1 0.00	I Good source	 		
139: Jarvis	 45 	 Poor: Depth to saturated zone 	 0.00 		 0.00 0.50		
Salchaket	 45 	Poor: Depth to saturated zone -	 0.00 	Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50		

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	 Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	 Value 	Rating class and limiting features	Value
140: Lemeta		Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 1 0.00 0.00 1 0.00	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	0.00
141: Liscum	 50 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Noonku	 45 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
142: Minto	 80 	 Poor: Depth to saturated zone 	 0.00 		 0.00 0.00
143: Minto	 70 	 Poor: Depth to saturated zone 	 0.00 		 0.00 0.00
144: Minto	 60 	 Poor: Depth to saturated zone Slope 	 0.00 0.96 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
145: Minto	 45 		 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Chatanika	40 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.01 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01
146: Minto	 40 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Chatanika	 35 	Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.01 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct.	Potential source of topsoil		Potential source of roadfill			
	map unit (Alaska criteria)		I (Alaska criteria)				
		Rating class and limiting features	Value	Rating class and I limiting features	l Value		
147: Minto			 0.00 0.96	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
Chatanika	 40 	Poor: Depth to saturated zone No permafrost depth limitation Slope	 0.00 0.01 0.96	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01		
148: Minto	 45 		 0.00 0.00		 0.00 0.00		
Chatanika	 40 	Poor: Depth to saturated zone No permafrost depth limitation Slope	 0.00 0.01 0.37	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01		
149: Mosquito	 85 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth	 0.00 0.00 0.08		
150: Mosquito	 45 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08		
Noonku	 40 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
151: Noonku	 80 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
152: North Pole	 85 	Poor: Depth to saturated zone	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct.	Potential source of topsoil	Potential source of roadfill				
	I map I I unit I (Alaska criteria)		I (Alaska criteria)				
	i I I	Rating class and limiting features	Value	Rating class and I limiting features	Value		
153: North Pole	 50 		0.00	Poor: Popth to saturated zone High frost action (check lower layers)	 0.00 0.00		
Mosquito	 30 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08		
Liscum	20 	Poor: Depth to saturated zone 	0.00	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
154: North Pole	 55 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 		
Noonku	 25 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 		
155: Peede	 85 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
156: Peede	 70 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
Mosquito	 25 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08		
157: Piledriver	 75 	 Poor: Depth to saturated zone 	 0.00		 0.00 0.00		
158: Piledriver	 50 		 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		
Eielson	 35 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00		

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map	Potential source of topsoil	 	Potential source of roadfill	
	l unit	(Alaska criteria)	į	(Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
159: Piledriver	 50 		10.00		 0.00 0.00
Fubar	40	Poor: Rock fragment content	0.00	Good source	
160: Pits, gravel	 100	 Not rated	i i	l Not rated	
161: Pits, quarry	 100	l I Not rated	i i	l I Not rated	
162: Riverwash	 100	l I Not rated	i i	l I Not rated	; !
163: Salchaket	 85 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50
164: Salchaket	 45 	 Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50
Typic Cryorthents	 40 	 Poor: Rock fragment content	 0.00	 Fair: Moderate frost action (check lower layers)	 0.50
165: Saulich	 80 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.01 0.95	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	0.00
166: Saulich	 80 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Slope Too acid	0.00 0.00 0.00 0.01 0.84 0.95	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	0.00
167: Saulich	 75 	Poor: Depth to saturated zone Content of organic matter Slope No permafrost depth limitation Too acid	 0.00 0.00 0.00 0.01 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	0.00

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	 Pct. of map	Potential source of topsoil		Potential source of roadfill	
	l unit l	(Alaska criteria)		(Alaska criteria)	
	 	Rating class and limiting features	l Value l l	Rating class and limiting features 	Value
168: Saulich	 40 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.01 0.95	Poor: Poor: Popth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01
Minto	 40 	Poor: Depth to saturated zone Slope 	 0.00 0.96 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
169: Saulich	 40 	Poor: Depth to saturated zone Content of organic matter Slope No permafrost depth limitation Too acid	 0.00 0.00 0.00 10.01 10.95	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	0.00
Minto	 35 	Poor: Depth to saturated zone Slope 	 0.00 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
170: Steese	 80 	 Fair: Depth to bedrock 	 0.79 	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
171: Steese	 80 	 Fair: Depth to bedrock Slope 	 0.79 0.84 	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
172: Steese	 70 	 Poor: Slope Depth to bedrock	 0.00 0.79 	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
173: Steese	 75 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
174: Steese	 85 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
175: Steese	 90 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map	Potential source of topsoil	; 	Potential source of roadfill	
	l unit	(Alaska criteria)	İ	(Alaska criteria)	
	i i	Rating class and limiting features	Value	Rating class and I limiting features	Value
176: Steese	 55 	Poor: Slope Depth to bedrock	 0.00 0.79		 0.00 0.50
Gilmore	25 Poor: Rock fragment content Depth to bedrock Slope		1 1 0.00 1 0.00 1 0.00	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
177: Steese	 50 	Poor: Slope Depth to bedrock	 0.00 0.79 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
Gilmore	 40 	Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 0.00	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
178: Steese	 50 	Poor: Slope Depth to bedrock	 0.00 0.79 		 0.00 0.00 0.50
Gilmore	 40 	Poor: Slope Rock fragment content Depth to bedrock	 0.00 0.00 0.00	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
179: Steese	 45 	Poor: Slope Depth to bedrock	 0.00 0.79 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
Gilmore	 45 	Poor: Slope Rock fragment content Depth to bedrock	 0.00 0.00 0.00	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
180: Tanacross	 90 	Poor: Depth to saturated zone Content of organic matter Depth to permafrost Too acid	 0.00 0.00 10.00 0.32	Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00
181: Tanana	 75 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.14 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.14

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map	Potential source of topsoil	i	Potential source of roadfill				
	l unit	(Alaska criteria)	į	(Alaska criteria)				
		Rating class and limiting features	 Value 	Rating class and limiting features	Value			
182:		 		 				
Tanana	60 	Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.14 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.14			
Mosquito	 20 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08			
183: Typic Cryaquents	 30 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00			
Histic Cryaquepts	 25 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 			
Terric Cryofibrists	 20 	Poor: Depth to saturated zone Content of organic matter	 0.00 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers) Low strength	 0.00 0.00 0.00			
184: Typic Cryorthents	 80 	I I I Good source I	 	 	 0.50			
185: Typic Cryorthents, fill	 45 	 Poor: Rock fragment content	 0.00	 	 0.50			
Urban land	l l 45	Not rated		Not rated				
186: Urban land	 100	 Not rated		I I Not rated				
187: Water	 100	 Not rated		 Not rated				

Table 20. Hydric Soils List

	i		Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric l soil l	I Local landform I I	l Hydric l criteria l code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria	
101: Bolio (75%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes 	
Goldstream (10%)	l I Yes	lvalley floors	l 2B3,3	l Yes	l No	l Yes	
Lemeta (10%)	Yes	Ifens on terraces	1,3	l Yes	l No	Yes	
Chatanika (5%)	l Yes	lhills	2B3	l Yes	l No	l No	
Water (0%)	lUnranked	ldepressions					
102: Bradway (85%)	l I Yes	l Idepressions	l l 2B3,3	 Yes	l I No	l I Yes	
Mosquito (5%)	 Yes 	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	l No	 Yes 	
North Pole (5%)	l Yes	lalluvial flats	l 2B3,3	l Yes	l No	 Yes	
Tanana (3%)	l Yes	Iterraces	l 2B3,3	l Yes	l No	l Yes	
Noonku (2%)	 Yes	Isloughs	l 2B3,3	Yes	l No	Yes	
103: Chatanika (75%)	l Yes	l Ihills	 2B3	l Yes	l I No	l I No	
Goldstream (10%)	l I Yes	l Ivalley floors	l l 2B3,3	 Yes	l I No	l I Yes	
Chatanika, slopes more than 3 percent (7%)	l I Yes	l Ihills	l l 2B3	l Yes	l I No	l I No	
Minto (5%)	l I No	l Ihills	 		 	 	
Saulich (3%)	 Yes	l Ivalley sides	l l 2B3	l Yes	l No	l No	
Histels (0%)	l I Yes I	l ldepressions on l terraces, flats l on terraces	 1,3 	 Yes 	 No 	 Yes 	
Water (0%)	l lUnranked	l Idepressions					
104: Chatanika (75%)	। । । Yes	l Ihills	 2B3	l I Yes	l I No	l I No	
Chatanika, slopes less than 3 percent (5%)	l I Yes	l Ihills	l l 2B3	l Yes	l I No	l I No	
Chatanika, slopes more than 7 percent (5%)	l I Yes	l Ihills	l l 2B3	l Yes	l I No	l I No	
Goldstream (5%)	l I Yes	l Ivalley floors	l l 2B3,3	l I Yes	l I No	l I Yes	
Minto (5%)	l I No	l Ihills		 	 	 	
Saulich (5%)	l Yes	l Ivalley sides	l l 2B3	 Yes	l No	l No	
105: Chatanika (80%)	I I I Yes	l Ihills	 2B3	 Yes	l l No	l l l No	
Chatanika, slopes less than 7 percent (5%)	l Yes	l hills	l 2B3	l Yes	l No	l No	
Chatanika, slopes more than 12 percent (5%)	l Yes	l Ihills	 2B3	 Yes	l No	l No	
Goldstream (5%)	l Yes	l Ivalley floors	 2B3,3	 Yes	l No	 Yes	
Minto (5%)	l No	l Ihills	 		 	 	

Table 20. Hydric Soils List—Continued

			Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil	l Local landform I I	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria	
106: Chatanika (80%)	 Yes	l I Ihills	 2B3	l I Yes	 No	l I No	
Chatanika, slopes less than 12 percent (10%)	l Yes	l Ihills	l l 2B3	l Yes	l No	l No	
Goldstream (5%)	l Yes	l Ivalley floors	l l 2B3,3	 Yes	l No	l Yes	
Minto (5%)	No	l Ihills					
107: Chatanika (55%)	l Yes	 hills	l l 2B3	l Yes	l l No	l l No	
Goldstream (35%)	l Yes	lvalley floors	2B3,3	l Yes	l No	Yes	
Minto (5%)	l No	lhills					
Chatanika, slopes more than 5 percent (3%)	l Yes	l Ihills	 2B3	l Yes	l No	l No	
Histels (2%)	I I Yes I	l depressions on l terraces, flats l on terraces	 1,3 	 Yes 	l No	 Yes 	
Water (0%)	Unranked	l Idepressions					
108: Chena (90%)	No	 stream terraces				 	
Jarvis (5%)	No	Iflood plains					
Noonku (5%)	l Yes	lsloughs	l 2B3,3	l Yes	l No	Yes	
109: Dumps, landfill (100%)	 Unranked 	I Isanitary I landfills	 		 	 	
110: Dumps, mine (100%)	lUnranked I	l Ispoil piles	i 	i 	i 	i 	
111: Eielson (80%)	l No	l Iflood plains	i 	i 	i 	i 	
Peede (10%)	 Yes 	l Idepressions on I flood plains	 3,2B3 	l Yes	l l No l	 Yes 	
Tanana (10%)	l Yes	l Iterraces	l l 2B3,3	l Yes	l No	 Yes	
112: Eielson (60%)	No	l Iflood plains				 	
Piledriver (30%)	l No	Iflood plains					
Fubar (5%)	No	l Iflood plains					
Noonku (3%)	l Yes	lsloughs	l 3,2B3	l Yes	l No	Yes	
Salchaket (2%)	No	l lflood plains					
113: Eielson (50%)	No	l Iflood plains			 	 	
Tanana (35%)	l Yes	l Iterraces	l l 2B3,3	l Yes	l No	 Yes	
Peede (10%)	l Yes	l Idepressions on I flood plains	 2B3,3 	l Yes	l l No l	 Yes 	
Tanacross (5%)	I Yes	l lalluvial flats l	 2B3,3 	l Yes	l l No l	 Yes 	
		•					

Table 20. Hydric Soils List—Continued

	 		l Hydric soils criteria			
Map symbol and soil name (percent composition)	l Hydric I soil I	l Local landform I I	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
114: Ester (70%)	l I .I Yes	l I Ihills	 2B2,2B3	 Yes	l l No	l l No
Brigadier (5%)	l .l No	l Ihills	 		 	
Ester, rolling (5%)	l .l Yes	l Ihills	l l2B3,2B2	 Yes	l No	l l No
Ester, very steep (5%)	l .l Yes	l Ihills	l l2B3,2B2	 Yes	l No	l No
Gilmore (5%)	l .l No	l Ihills				
Saulich (5%)	l .l Yes	l Ivalley sides	l l 2B3	 Yes	l No	l No
Steese (5%)	l .l No	l lhills	ļ !		 	
115: Ester (75%)	l .l Yes	l Ihills	 2B3,2B2	l I Yes	l l No	l l No
Brigadier (10%)	.l No	l hills				
Ester, slopes less than 45 percent (10%)	l .l Yes	l Ihills	l l2B2,2B3	 Yes	l No	l No
Gilmore (5%)	l .l No	l lhills	ļ			
116:			ļ			
Fairbanks (80%)	ĺ	lhills I				
Minto (10%)	I	Ihills				
Fairbanks, slopes less than 3 percent (5%)	I	hills 				
Fairbanks, slopes more than 7 percent (5%)	.l No l	lhills				
117: Fairbanks (80%)	.l No	Ihills				
Fairbanks, slopes more than 12 percent (10%)	.l No	lhills				
Fairbanks, slopes less than 7 percent (5%)	.l No	Ihills				
Minto (5%)	.l No	Ihills				
118: Fairbanks (70%)	l .l No	l Ihills	 		 	
Fairbanks, slopes less than 12 percent (10%)	l .l No	l Ihills	ļ !		 	
Fairbanks, slopes more than 20 percent (10%)	l .l No	l Ihills				
Minto (5%)	l .l No	l Ihills				
Steese (5%)	l .l No	l Ihills	 	 	 	
119: Fairbanks (80%)	 . No	l I Ihills			 	
Fairbanks, slopes less than 20 percent (10%)	I .l No	l Ihills	 		 	
Fairbanks, slopes more than 30 percent (5%)	l .l No	l Ihills				
Steese (5%)	l .l No	l Ihills				
120: Fairbanks (85%)	l .l No	l I Ihills		 		
Fairbanks, slopes less than 30 percent (5%)	.l No	l Ihills				
Fairbanks, slopes more than 45 percent (5%)	.l No	l Ihills				
Steese (5%)	l .l No	l Ihills	 		 	

Table 20. Hydric Soils List—Continued

	 	 	l Hydri	 Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric I soil I	l Local landform I I	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria		
121: Fairbanks, strongly sloping (60%)	 No	l I Ihills	 	 		 		
Fairbanks, steep (30%)	l I No	l Ihills	 	 	 	 		
Minto (5%)	l I No	l Ihills	 	 	 	 		
Steese (5%)	l I No	l Ihills	 					
122: Fairbanks (55%)	l l l No	l hills		 				
Steese (30%)	l No	lhills						
Fairbanks, slopes less than 12 percent (5%)	l No	Ihills						
Fairbanks, slopes more than 20 percent (3%)	l No	lhills						
Steese, slopes more than 20 percent (3%)	l No	lhills						
Gilmore (2%)	l No	lhills	i					
Steese, slopes less than 12 percent (2%)	l No	Ihills			 			
123: Fairbanks (40%)	l I No	l hills			 			
Steese (30%)	l No	Ihills			 			
Fairbanks, slopes less than 20 percent (10%)	I I No	Ihills						
Steese, slopes less than 20 percent (10%)	l No	lhills						
Gilmore (5%)	l No	lhills						
Steese, slopes more than 30 percent (5%)	l No	Ihills			 			
124: Fubar (50%)	l I No	 flood plains		i 		ļ		
Piledriver (40%)	l No	Iflood plains						
Eielson (5%)	l No	Iflood plains						
Noonku (3%)	l Yes	Isloughs	l 2B3,3	Yes	l No	l Yes		
North Pole (2%)	l Yes	lalluvial flats	l 2B3,3	Yes	l No	Yes		
125: Gilmore (80%)	l No	l Ihills		 		ļ 		
Gilmore, slopes less than 3 percent (10%)	l No	Ihills						
Gilmore, slopes more than 7 percent (5%)	l No	Ihills						
Steese (5%)	l I No	lhills						
126: Gilmore (70%)	I I I No	l hills		 	 			
Gilmore, slopes more than 12 percent (13%)	ı I No	l Ihills						
Gilmore, slopes less than 7 percent (10%)	I I No	l Ihills						
Steese (7%)	I I No I	l Ihills I		 	 			

Table 20. Hydric Soils List—Continued

		 Local landform 	l Hydric soils criteria			
Map symbol and soil name (percent composition)	l Hydric l soil l		l Hydric l criteria l code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
127: Gilmore (75%)	 No	l I Ihills		 	 	
Gilmore, slopes less than 12 percent (10%)	No	l Ihills	ļ ļ		 	
Gilmore, slopes more than 20 percent (10%)	No	l Ihills	ļ		 	
Steese (5%)	No	l Ihills				
128: Gilmore (70%)	 No	 hills			 	
Gilmore, slopes less than 20 percent (12%)	No	l Ihills	 		 	
Steese (10%)	No	l Ihills	 	 	 	
Gilmore, slopes more than 30 percent (5%)	No	l Ihills	ļ			
Ester (3%)	l Yes	l Ihills	 2B2,2B3	l Yes	l No	l No
129: Gilmore (85%)	 No	 hills				
Gilmore, slopes less than 30 percent (10%)	No	l Ihills	 	 	 	
Steese (3%)	No	l Ihills	 		 	
Rock outcrop (2%)	Unranked	l Ihills				
130: Gilmore (85%)	 No	 hills			 	
Ester (5%)	∣ I Yes	l Ihills	l l2B2,2B3	l Yes	l No	l I No
Gilmore, slopes less than 45 percent (5%)	No	l Ihills	 		 	
Steese (3%)	No	l Ihills				
Rock outcrop (2%)	Unranked	lhills				
131: Gilmore (40%)	No	l Ihills			 	
Ester (40%)	Yes	l Ihills	l l2B2,2B3	 Yes	l No	l l No
Brigadier (12%)	No	l Ihills			ļ	ļ
Steese (5%)	No	l Ihills				
Saulich (3%)	Yes	lvalley sides	l 2B3	Yes	l No	l No
132: Gilmore (65%)	l No	l Ihills				
Steese (33%)	 No	l Ihills	 		 	
Steese, slopes more than 15 percent (2%)	 No	l lhills	 	 	 	
133: Goldstream (80%)	 Yes	 valley floors	 2B3,3	 Yes	 No	 Yes
Chatanika (10%)	1	l Ihills	l l 2B3	l I Yes	l No	l l No
Histels (5%)	1	l depressions on l terraces, flats l on terraces	 1,3 	Yes	 No 	 Yes
Goldstream, slopes more than 3 percent (3%)	Yes	lvalley floors	l l 2B3,3	l Yes	l No	 Yes
Typic Cryaquents (2%)	l Yes	l Idepressions	l l 3,2B3	l Yes	l I No	l I Yes

Table 20. Hydric Soils List—Continued

			l Hydric soils criteria			
Map symbol and soil name (percent composition)	Hydric soil	l Local landform I I	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
134: Goldstream (80%)	l I l Yes	l l lvalley floors	 2B3,3	 Yes	 No	l l Yes
Chatanika (10%)	l l Yes	l hills	l l 2B3	l Yes	l No	l No
Histels (5%)	 Yes 	l depressions on l terraces, flats l on terraces	 1,3 	Yes	 No 	 Yes
Minto (5%)	I l No	l lhills		ļ		
Typic Cryaquents (0%)	l Yes	l Idepressions	l 2B3,3	l Yes	l No	l Yes
135: Goldstream (50%)	l l Yes	l Ivalley floors	 2B3,3	 Yes	 No	l Yes
Histels (45%)	l Yes I	Idepressions on I terraces, flats I on terraces	1,3 	Yes	l No	Yes
Terric Cryofibrists (5%)	I l Yes I	I Ithermokarst I depressions	1,3	Yes	l No	l Yes
136: Histels (90%)	l Yes	I depressions on terraces, flats	 1,3 	 Yes 	 No 	 Yes
Goldstream (10%)	l Yes	l Ivalley floors	l l 2B3,3	l Yes	l No	l Yes
137: Jarvis (75%)	 No	l Iflood plains				
Salchaket (10%)	No	Iflood plains	ļ	i		
Chena (5%)	No	stream terraces				
Noonku (5%)	l Yes	lsloughs	3,2B3	l Yes	l No	Yes
Tanana (5%)	l Yes	Iterraces	2B3,3	l Yes	l No	Yes
138: Jarvis (55%)	.l No	l Iflood plains				
Chena (35%)	No	stream terraces				
Noonku (5%)	l Yes	Isloughs	2B3,3	l Yes	l No	Yes
Salchaket (5%)	l No	Iflood plains				
139: Jarvis (45%)	 No	l Iflood plains				
Salchaket (45%)	l No	Iflood plains			 	
Tanana (5%)	l Yes	Iterraces	l 2B3,3	Yes	l No	Yes
Chena (2%)	l No	Istream terraces				
Noonku (2%)	l Yes	l Isloughs	l l 3,2B3	l Yes	l No	l Yes
North Pole (1%)	l Yes	lalluvial flats I	l 2B3,3 l	Yes	l No	l Yes

Table 20. Hydric Soils List—Continued

			Hydric soils criteria			
Map symbol and soil name (percent composition)	l Hydric l soil l	l Local landform I I	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
140: Lemeta (75%)	l l Yes	I I Ifens on terraces	 1,3	 Yes	l l No	l I Yes
Bolio (10%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes
Goldstream (10%)	Yes	l Ivalley floors	l l 2B3,3	 Yes	l No	 Yes
Chatanika (5%)	l Yes	l Ihills	l l 2B3	l Yes	l No	l No
Water (0%)	l Unranked	l Idepressions				
141: Liscum (50%)	l Yes	l lalluvial flats	 3,2B3	 Yes	I I No	 Yes
Noonku (45%)	Yes	lsloughs	3,2B3	l Yes	l No	l Yes
North Pole (5%)	Yes	lalluvial flats	l 2B3,3	l Yes	l No	 Yes
142: Minto (80%)	¦ No	l Ihills	 		 	
Chatanika (10%)	l I Yes	l Ihills	l l 2B3	l Yes	l I No	l I No
Fairbanks (5%)	l No	l Ihills			 	
Minto, slopes more than 3 percent (5%)	No	l Ihills			 	
143: Minto (70%)	 No	l Ihills			 	
Chatanika (13%)	l Yes	l Ihills	 2B3	 Yes	l No	l No
Minto, slopes more than 7 percent (7%)	No	l Ihills			 	
Fairbanks (5%)	No	l Ihills				
Minto, slopes less than 3 percent (5%)	No	l hills				
144: Minto (60%)	No	l Ihills			 	
Chatanika (10%)	l l Yes	l Ihills	l l 2B3	l I Yes	l No	l I No
Minto, slopes less than 7 percent (10%)	l No	l Ihills		 	 	
Minto, slopes more than 12 percent (10%)	No	l Ihills		 	 	
Fairbanks (5%)	No	l Ihills				
Saulich (5%)	Yes	l Ivalley sides	 2B3	l Yes	l No	l No
145: Minto (45%)	l No	l Ihills			 	
Chatanika (40%)	Yes	l lhills	 2B3	l Yes	l No	l l No
Chatanika, slopes more than 3 percent (5%)	Yes	l Ihills	 2B3	l Yes	l No	l l No
Goldstream (5%)	Yes	l lvalley floors	l l 2B3,3	l Yes	l No	 Yes
Minto, slopes more than 3 percent (5%)	l No	l Ihills			 	

Table 20. Hydric Soils List—Continued

	 	 	 Hydric soils criteria			
Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
146: Minto (40%)	l I l No	l I Ihills	 	 	 	
Chatanika (35%)	l l Yes	l Ihills	l l 2B3	l I Yes	l I No	l I No
Minto, slopes less than 3 percent (7%)	l l No	l Ihills	 	 	 	
Minto, slopes more than 7 percent (7%)	l l No	l Ihills	 	 	 	
Saulich (5%)	l l Yes	l Ivalley sides	l l 2B3	l I Yes	l I No	l I No
Chatanika, slopes less than 3 percent (2%)	l l Yes	l Ihills	l l 2B3	l I Yes	l I No	l I No
Chatanika, slopes more than 7 percent (2%)	l l Yes	l Ihills	l l 2B3	l I Yes	l I No	l I No
Goldstream (2%)	l l Yes	l Ivalley floors	l l 2B3,3	 Yes	l No	l Yes
147: Minto (45%)	 No	l Ihills	 	 	 	
Chatanika (40%)	l l Yes	l Ihills	l l 2B3	 Yes	l I No	l I No
Minto, slopes more than 12 percent (10%)	 l No	l Ihills	 	 	 	
Chatanika, slopes less than 7 percent (5%)	l l Yes	l Ihills	l l 2B3	 Yes	l I No	l I No
Typic Cryaquents (0%)	l l Yes	l Idepressions	l l 2B3,3	l I Yes	l I No	l I Yes
148:	 	1	1		 	
Minto (45%)	l No 	lhills I	 	 	 	
Chatanika (40%)	I Yes I	lhills I	2B3 	Yes	l No	l No
Minto, slopes more than 20 percent (7%)	l No I	lhills I	 	 	 	
Chatanika, slopes less than 12 percent (5%)	l Yes I	lhills I	2B3 	Yes	l No	l No
Saulich (3%)	l Yes I	lvalley sides I	2B3 	Yes	l No	l No
149: Mosquito (85%)	l l Yes l	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	 No 	 Yes
Bolio (5%)	l l Yes l	I Iflats on I terraces, I depressions on I terraces	 1,3 	 Yes 	 No 	 Yes
Bradway (5%)	l l Yes	l Idepressions	l l 3,2B3	l I Yes	l I No	l I Yes
Liscum (5%)	l l Yes	l lalluvial flats	l l 3,2B3	 Yes	l No	l Yes
Water (0%)	l Unranked	l Idepressions				
150: Mosquito (45%)	 Yes 	 depressions on alluvial flats	 2B3,3 	 Yes 	 No 	 Yes
Noonku (40%)	l l Yes	l Isloughs	l l 2B3,3	l I Yes	l No	l I Yes
Bradway (5%)	l l Yes	l Idepressions	l l 3,2B3	 Yes	l No	l I Yes
North Pole (5%)	l l Yes	l lalluvial flats	l l 2B3,3	l I Yes	l No	l I Yes
Tanana (5%)	l l Yes l	l Iterraces I	 2B3,3 	 Yes 	l l No l	 Yes

Table 20. Hydric Soils List—Continued

	 	1 1	l Hydri	 Hydric soils criteria 			
Map symbol and soil name (percent composition)	l Hydric I soil I	Local landform	Hydric I criteria I code	Meets saturation criteria 	Meets flooding criteria	l Meets lponding lcriteria	
151: Noonku (80%)	l I I Yes	l I Isloughs	 3,2B3	l I Yes	l l No	l l Yes	
Liscum (5%)	Yes	l alluvial flats	l l 2B3,3	l Yes	l No	l Yes	
North Pole (5%)	Yes	l lalluvial flats	l l 2B3,3	l Yes	l No	 Yes	
Tanacross (5%)	l Yes	l lalluvial flats	l l 2B3,3	l I Yes	l No	l Yes	
Tanana (5%)	l Yes	l Iterraces	l l 2B3,3	 Yes	l No	l Yes	
152: North Pole (85%)	 Yes	l alluvial flats	 2B3,3	 Yes	l l No	l l Yes	
Tanana (5%)	Yes	l Iterraces	l l 2B3,3	 Yes	l No	l Yes	
Mosquito (3%)	l l Yes	l Idepressions on I alluvial flats	 2B3,3 	Yes	l No	 Yes 	
Noonku (3%)	Yes	l Isloughs	l l 3,2B3	 Yes	l No	l Yes	
Eielson (2%)	No	l Iflood plains	 	 	 	 	
Liscum (2%)	l Yes	l lalluvial flats	l l 2B3,3	l Yes	l No	 Yes	
153: North Pole (50%)	l l Yes	l lalluvial flats	l l 2B3,3	 Yes	l l No	l I Yes	
Mosquito (30%)	l Yes	ldepressions on l alluvial flats	 2B3,3 	Yes	l No	l Yes	
Liscum (20%)	l l Yes	l lalluvial flats	 3,2B3	 Yes	l No	 Yes	
Histels (0%)	I III I	l depressions on l flood plains, l flats on flood l plains	 1,3 	I Yes I I	 No 	Yes 	
Typic Cryaquents (0%)	l Yes	lflood plains	 3,2B3	l Yes	l No	 Yes	
154: North Pole (55%)	l l Yes	l lalluvial flats	l l 2B3,3	 Yes	l l No	l l Yes	
Noonku (25%)	l Yes	l Isloughs	l 3,2B3	l Yes	l No	Yes	
Bradway (5%)	l Yes	l Idepressions	l 3,2B3	l Yes	l No	Yes	
Eielson (5%)	No	I Iflood plains					
Piledriver (5%)	No	I Iflood plains					
Tanana (5%)	Yes	Iterraces	l 2B3,3	l Yes	l No	Yes	
155: Peede (85%)	 	l depressions on flood plains	 3,2B3 	l I Yes I	 No 	 Yes 	
Mosquito (10%)	l l Yes	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	l No	 Yes 	
Liscum (5%)	l l Yes	l lalluvial flats l	 2B3,3 	 Yes 	l I No I	l I Yes I	
156: Peede (70%)	Yes	l Idepressions on I flood plains	 3,2B3 	 Yes 	l No	 Yes	
Mosquito (25%)	l Yes	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	l No	 Yes 	
Liscum (5%)	l Yes	l lalluvial flats l	 3,2B3 	 Yes 	l l No l	l Yes	

Table 20. Hydric Soils List—Continued

	 		l Hydric soils criteria			
Map symbol and soil name (percent composition)	l Hydric I soil I	l Local landform 	Hydric criteria code	Meets saturation criteria 	Meets flooding criteria	l Meets lponding lcriteria
157: Piledriver (75%)	 . No	l Iflood plains		 		
Eielson (10%)	.l No	lflood plains	ļ		ļ	
Fubar (10%)	l .l No	l Iflood plains				
Tanana (3%)	l .l Yes	l Iterraces	l l 2B3,3	l Yes	l No	l Yes
North Pole (2%)	l .l Yes	l lalluvial flats	l l 2B3,3	l Yes	l No	 Yes
158: Piledriver (50%)	 No	l Iflood plains		 		
Eielson (35%)	.l No	Iflood plains	ļ		ļ	
Fubar (5%)	.l No	l Iflood plains	ļ	! !	 	
Noonku (5%)	l .l Yes	l Isloughs	l 3,2B3	Yes	l No	l Yes
Riverwash (5%)	l .lUnranked	l Iflood plains	ļ	 	 	
159: Piledriver (50%)	 . No	l Iflood plains		 		
Fubar (40%)	.l No	Iflood plains	ļ	ļ		
Eielson (7%)	.l No	l Iflood plains	ļ	! !	 	
Noonku (3%)	l .l Yes	l Isloughs	l l 3,2B3	Yes	l No	l Yes
160: Pits, gravel (100%)	। । .lUnranked ।	l Igravel pits		 		
161: Pits, quarry (100%)	l Unranked 	l Iquarries		 	 	
162: Riverwash (100%)	l IUnranked I	l Iflood plains	 	 	 	i
163: Salchaket (85%)	 . No 	l Iflood plains	 	 	 	
Jarvis (10%)	.l No	Iflood plains	j	i	i	j
Tanana (5%)	.l Yes	Iterraces	2B3,3	l Yes	l No	Yes
164: Salchaket (45%)	 No	Iflood plains	 	 	 	
Typic Cryorthents (40%)	.l No l	Iflood plains, I terraces		 		
Jarvis (10%)	.l No	Iflood plains				
Fubar (5%)	.l No	Iflood plains		ļ		
165: Saulich (80%)	l I I Yes	l Ivalley sides	 2B3	l Yes	l l No	l No
Goldstream (5%)	.l Yes	lvalley floors	l 2B3,3	Yes	l No	l Yes
Saulich, slopes less than 3 percent (5%)	.l Yes	lvalley sides	l 2B3	l Yes	l No	l No
Saulich, slopes more than 7 percent (5%)	.l Yes	lvalley sides	l 2B3	l Yes	l No	l No
Chatanika (3%)	.l Yes	l hills	l 2B3	l Yes	l No	l No
Minto (2%)	.l No	l lhills				

Table 20. Hydric Soils List—Continued

	 		Hydric soils criteria			
Map symbol and soil name (percent composition)	Hydric soil	l Local landform 	Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
166: Saulich (80%)	l Yes	l I Ivalley sides	 2B3	 Yes	 No	l No
Goldstream (5%)	l l Yes	l Ivalley floors	l l 2B3,3	l I Yes	l I No	l I Yes
Saulich, slopes less than 7 percent (5%)	Yes	l Ivalley sides	l l 2B3	l Yes	l No	l l No
Saulich, slopes more than 12 percent (5%)	Yes	l Ivalley sides	l l 2B3	 Yes	l No	l No
Chatanika (3%)	l Yes	l Ihills	 2B3	 Yes	l No	l No
Minto (2%)	l No	l Ihills				
167: Saulich (75%)	Yes	l Ivalley sides	 2B3	l I Yes	l l No	l l No
Ester (5%)	l Yes	Ihills	1 12B3,2B2	Yes	l No	l No
Goldstream (5%)	l Yes	lvalley floors	l 2B3,3	Yes	l No	l Yes
Saulich, slopes less than 12 percent (5%)	l Yes	lvalley sides	l 2B3	Yes	l No	l No
Saulich, slopes more than 20 percent (5%)	l Yes	lvalley sides	l 2B3	l Yes	l No	l No
Chatanika (3%)	l Yes	lhills	l 2B3	Yes	l No	l No
Minto (2%)	l No	lhills				
168: Saulich (40%)	Yes	l Ivalley sides	 2B3	 Yes	l l No	l l No
Minto (40%)	l No	l lhills				
Minto, slopes more than 12 percent (5%)	l No	Ihills	ļ			
Saulich, slopes less than 7 percent (5%)	l Yes	lvalley sides	l 2B3	l Yes	l No	l No
Minto, slopes less than 7 percent (3%)	l No	lhills				
Saulich, slopes more than 12 percent (3%)	l Yes	lvalley sides	l 2B3	l Yes	l No	l No
Chatanika (2%)	l Yes	lhills	l 2B3	Yes	l No	l No
Goldstream (2%)	l Yes	lvalley floors	l 2B3,3	Yes	l No	l Yes
169: Saulich (40%)	Yes	l Ivalley sides	 2B3	 Yes	l l No	l l No
Minto (35%)	l No	l lhills	ļ			
Minto, slopes less than 12 percent (5%)	l No	l Ihills				
Minto, slopes more than 20 percent (5%)	l No	l hills				
Saulich, slopes more than 20 percent (5%)	l Yes	l Ivalley sides	 2B3	l Yes	l No	l No
Chatanika (3%)	l Yes	l lhills	 2B3	Yes	l No	l No
Saulich, slopes less than 12 percent (3%)	l Yes	l Ivalley sides	 2B3	l Yes	l No	l No
Ester (2%)	l Yes	l Ihills	l l2B3,2B2	 Yes	l No	l No
Goldstream (2%)	l Yes	l Ivalley floors	l l 2B3,3	l Yes	l No	l I Yes

Table 20. Hydric Soils List—Continued

	 	 Local landform 	 Hydric soils criteria			
Map symbol and soil name (percent composition)	l Hydric l soil l		Hydric criteria code	Meets saturation criteria	Meets flooding criteria	l Meets lponding lcriteria
170: Steese (80%)	l I I No	 hills	 	 	 	
Steese, slopes more than 7 percent (10%)	l I No	l Ihills	 	 	 	
Fairbanks (5%)	l I No	l lhills	 	 		
Gilmore (5%)	l I No	l lhills		 		
171: Steese (80%)	I I I No	l hills		 	 	
Steese, slopes more than 12 percent (10%)	I I No	lhills				
Fairbanks (5%)	l No	lhills		 		
Gilmore (5%)	l No	lhills	ļ	 		
172: Steese (70%)	l I No	lhills		 	 	
Steese, slopes more than 20 percent (10%)	l No	lhills	i			ļ
Fairbanks (8%)	l No I	lhills	i			
Gilmore (7%)	I No I	lhills	i	i	 	i
Steese, slopes less than 12 percent (5%)	l No I	lhills	i	i	 	i
173: Steese (75%)	 No	lhills		 	 	
Steese, slopes more than 30 percent (10%)	l No	lhills		 		
Gilmore (5%)	l No	lhills	i			ļ
Steese, slopes less than 20 percent (5%)	l No	lhills	i	 		
Fairbanks (3%)	l No I	lhills	i	 	 	i
Ester (2%)	I Yes I	lhills I	2B3,2B2 	l Yes	l No	l No
174: Steese (85%)	l I No	l hills	 		 	
Steese, slopes less than 30 percent (10%)	l No	lhills	i			
Gilmore (5%)	l No I	lhills	i		 	i
175: Steese (90%)	l I No	hills		 	i 	i
Gilmore (5%)	l I No	l lhills				
Steese, slopes less than 45 percent (5%)	I I No	l lhills				
176: Steese (55%)	I No	l Ihills		 	 	
Gilmore (25%)	ı I No	l hills		 		
Gilmore, slopes less than 12 percent (10%)	l No	l Ihills		 	 	
Steese, slopes more than 20 percent (10%)	l No l	lhills I		 	i	i

Table 20. Hydric Soils List—Continued

	 	 Local landform 	Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric I soil I		l Hydric l criteria l code	Meets saturation criteria 	Meets flooding criteria	l Meets lponding lcriteria	
177: Steese (50%)	l l l No	l I Ihills	 	 	 	 	
Gilmore (40%)	l l No	l Ihills	ļ !	 	 		
Gilmore, slopes less than 20 percent (5%)	l l No	l hills	ļ				
Steese, slopes less than 20 percent (5%)	l No	l hills					
178: Steese (50%)	l l No	l hills			 		
Gilmore (40%)	l No	lhills					
Gilmore, slopes less than 30 percent (5%)	l No	Ihills					
Steese, slopes more than 45 percent (5%)	l No	lhills					
179: Steese (45%)	l l No	l hills			 	 	
Gilmore (45%)	l No	Ihills					
Gilmore, slopes less than 45 percent (5%)	l No	lhills					
Steese, slopes less than 45 percent (5%)	l No	lhills					
180: Tanacross (90%)	l Yes	l lalluvial flats	 2B3,3	 Yes	l I No	 Yes	
Tanana (10%)	Yes	Iterraces	2B3,3	Yes	l No	l Yes	
181: Tanana (75%)	 Yes	l Iterraces	l l 2B3,3	 Yes	l I No	 Yes	
Bolio (5%)	 Yes 	ldepressions on l terraces, flats l on terraces	 1,3 	l Yes	No 	 Yes 	
Jarvis (5%)	l l No	l Iflood plains	ļ !	 	 		
Noonku (5%)	l I Yes	l Isloughs	l l 3,2B3	 Yes	l No	 Yes	
Salchaket (5%)	l l No	l Iflood plains					
Tanacross (5%)	l Yes	lalluvial flats	l 2B3,3	l Yes	l No	l Yes	
182: Tanana (60%)	 Yes	l Iterraces	 2B3,3	 Yes	l l l No	 Yes	
Mosquito (20%)	I I Yes I	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	l l No l	 Yes 	
Jarvis (10%)	l l No	l Iflood plains					
Liscum (5%)	l Yes	l lalluvial flats	l l 3,2B3	 Yes	l No	 Yes	
Noonku (5%)	। I Yes	l Isloughs	l l 3,2B3	l Yes	l No	l I Yes	

Soil Survey of

Table 20. Hydric Soils List—Continued

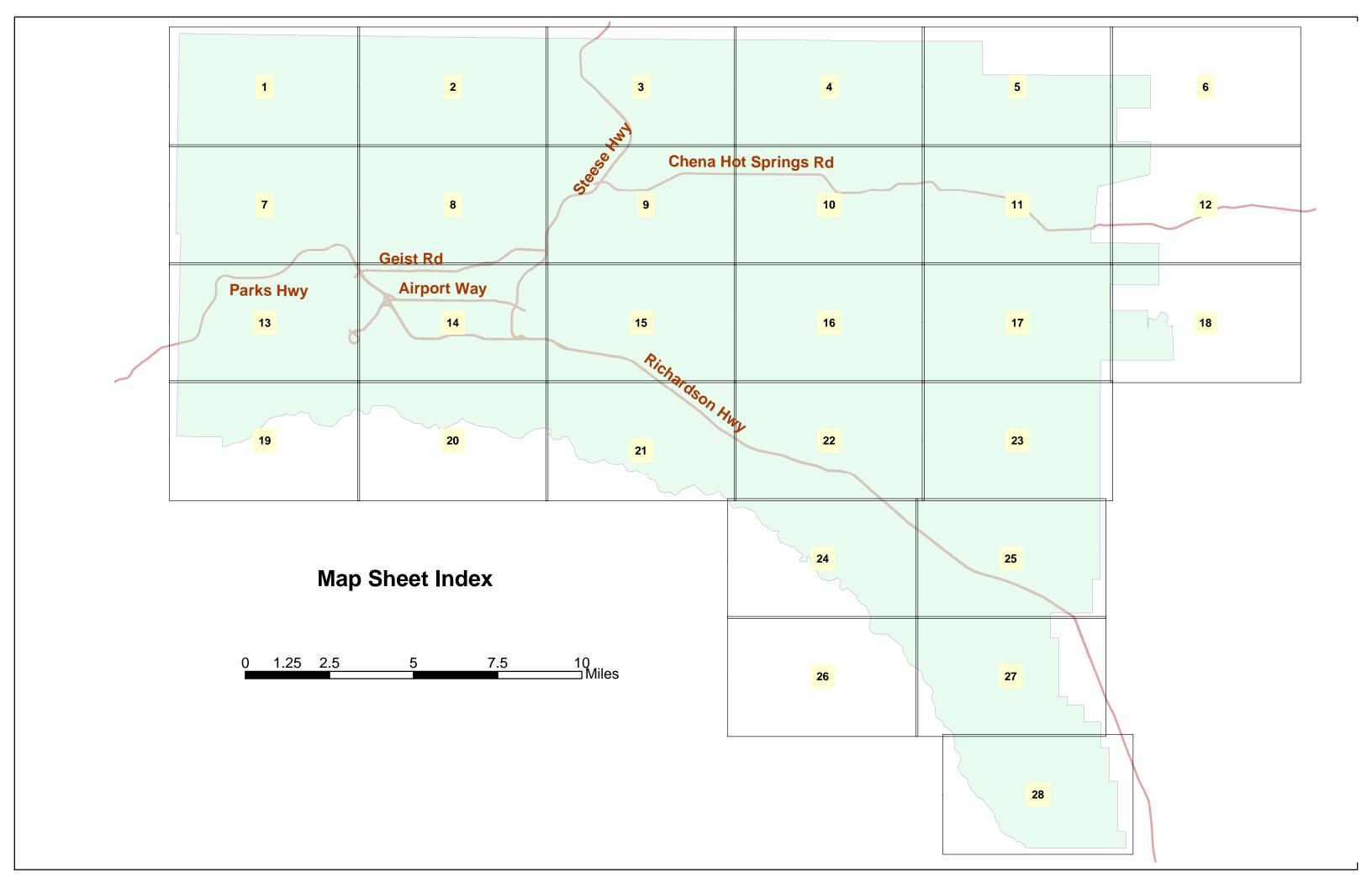
	İ	į	Hydric soils criteria			
Map symbol and soil name (percent composition)	l Hydric l soil l	Local landform	l Hydric l criteria l code	Meets saturation criteria 	Meets flooding criteria	Meets ponding criteria
183: Typic Cryaquents (30%)	 Yes	l Idepressions on I terraces	 2B3,3 	 Yes 	 No 	 Yes
Histic Cryaquepts (25%)		Idepressions on I terraces	 2B3,3 	Yes	l No	Yes
Terric Cryofibrists (20%)		I Ithermokarst I depressions	 3,1 	Yes	l No	Yes
Histels (15%)	l Yes	l Idepressions	1,3	l Yes	l No	 Yes
Water (10%)	lUnranked	Idepressions				
84: Typic Cryorthents (80%)		l Iflood plains, I terraces				
Fubar (5%)		l lflood plains			ļ	
Jarvis (5%)		l lflood plains				
Piledriver (5%)		Iflood plains				
Salchaket (5%)		Iflood plains				
85: Гуріс Cryorthents, fill (45%)		I Iflood plains, I terraces				
Urban land (45%)	lUnranked	lurban land				
Salchaket (5%)	No	Iflood plains				
Jarvis (3%)	No	Iflood plains				
Fubar (2%)	No	Iflood plains				
86: Jrban land (100%)	¦ IUnranked	l lurban land				
87: Water (100%)	lUnranked	l llakes				

Table 21. Classification of the Soils

Soil name	Family or higher taxonomic class
Bolio	l l Euic, subgelic Typic Hemistels
	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Brigadier	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Chatanika	Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels
Chena	Sandy-skeletal, mixed Typic Cryorthents
	Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents
	Loamy-skeletal, mixed, superactive, subgelic, shallow Typic
	l Histoturbels
Fairbanks	Coarse-silty, mixed, superactive Typic Eutrocryepts
	Sandy-skeletal, mixed Typic Cryofluvents
Gilmore	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Goldstream	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Histels	Histels
	Histic Cryaquepts
Jarvis	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive,
	I nonacid Typic Cryofluvents
Lemeta	Euic, subgelic Typic Fibristels
Liscum	Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts
Minto	Coarse-silty, mixed, superactive Aquic Eutrocryepts
Mosquito	Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels
Noonku	Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents
North Pole	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive,
	I nonacid Aeric Cryaquepts
	Coarse-silty, mixed, superactive, nonacid Typic Cryaquents
Piledriver	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive,
	I nonacid Aquic Cryofluvents
	Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents
Saulich	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Steese	Coarse-loamy, mixed, superactive Typic Eutrocryepts
	Coarse-loamy, mixed, superactive, subgelic Typic Histoturbels
	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Terric Cryofibrists	I Terric Cryofibrists
	I Typic Cryaquents
Typic Cryorthents	I Typic Cryorthents

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GREATER FAIRBANKS AREA, ALASKA

SOIL LEGEND

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

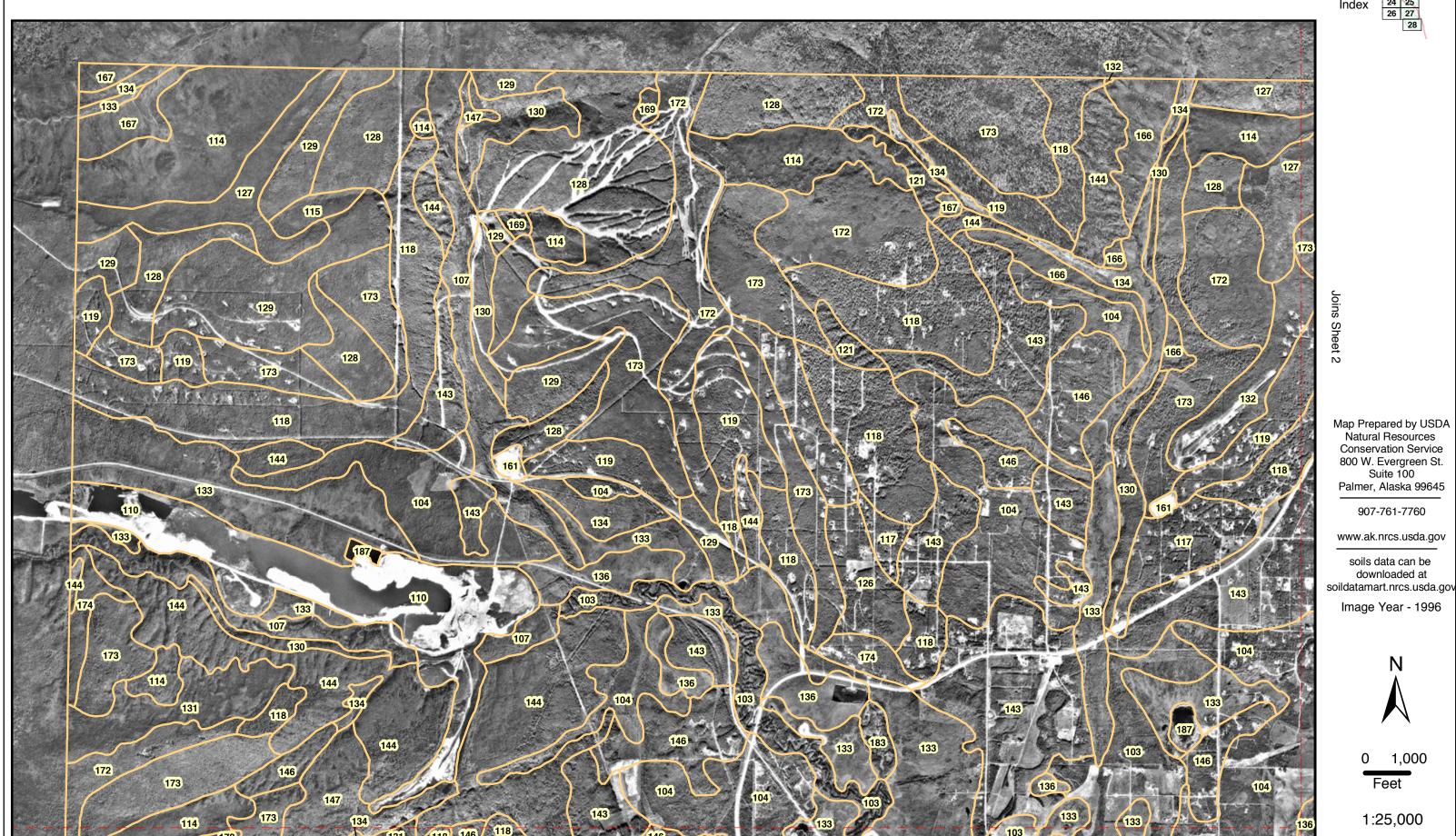
STMBULS LEGE						
SPE	ATURES	CULTURAL FE	Name	Symbol	Name	Symbol
			Minto-Chatanika complex, 0 to 3 percent slopes Minto-Chatanika complex, 3 to 7 percent slopes Minto-Chatanika complex, 7 to 12 percent slopes	145 146 147	Bolio Bradway very fine sandy loam Chatanika mucky silt loam, 0 to 3 percent slopes	101 102 103
SOIL DELINEATIO		BOUNDARIES	Minto-Chatanika complex, 12 to 20 percent slopes	148	Chatanika mucky silt loam, 3 to 7 percent slopes	104
		Limit of soil survey (label)	Mosquito mucky peat Mosquito-Noonku complex	149 150	Chatanika mucky silt loam, 7 to 12 percent slopes Chatanika mucky silt loam, 12 to 20 percent slopes	105 106
		Field sheet neatline	Noonku very fine sandy loam	151	Chatanika-Goldstream complex	107
		Fleid Stieet fleatilite	North Pole fine sandy loam	152	Chena very fine sandy loam	108
		Field sheet matchline	North Pole-Mosquito-Liscum complex North Pole-Noonku complex Peede silt loam	153 154 155	Dumps, landfill Dumps, mine Eielson fine sandy loam	109 110 111
			Peede-Mosquito complex	156	Eielson-Piledriver complex	112
			Piledriver very fine sandy loam	157	Eielson-Tanana complex	113
			Piledriver-Eielson complex	158	Ester peat, 20 to 45 percent slopes	114
			Piledriver-Fubar complex	159	Ester peat, very steep	115
			Pits, gravel	160 161	Fairbanks silt loam, 3 to 7 percent slopes Fairbanks silt loam, 7 to 12 percent slopes	116 117
			Pits, quarry Riverwash	162	Fairbanks silt loam, 12 to 20 percent slopes	117
			Salchaket very fine sandy loam	163	Fairbanks silt loam, 20 to 30 percent slopes	119
			Salchaket-Typic Cryorthents complex	164	Fairbanks silt loam, 30 to 45 percent slopes	120
			Saulich peat, 3 to 7 percent slopes	165	Fairbanks silt loams, strongly sloping and steep	121
			Saulich peat, 7 to 12 percent slopes	166	Fairbanks-Steese complex, 12 to 20 percent slopes	122
			Saulich peat, 12 to 20 percent slopes	167	Fairbanks-Steese complex, 20 to 30 percent slopes	123
			Saulich-Minto complex, 3 to 12 percent slopes	168	Fubar-Piledriver complex, occasionally flooded	124
			Saulich-Minto complex, 12 to 20 percent slopes	169	Gilmore silt loam, 3 to 7 percent slopes	125
			Steese silt loam, 3 to 7 percent slopes	170	Gilmore silt loam, 7 to 12 percent slopes	126
			Steese silt loam, 7 to 12 percent slopes	171	Gilmore silt loam, 12 to 20 percent slopes	127
			Steese silt loam, 12 to 20 percent slopes	172	Gilmore silt loam, 20 to 30 percent slopes	128
			Steese silt loam, 20 to 30 percent slopes	173	Gilmore silt loam, 30 to 45 percent slopes	129
			Steese silt loam, 30 to 45 percent slopes	174	Gilmore silt loam, 45 to 70 percent slopes	130
			Steese silt loam, 45 to 70 percent slopes	175	Gilmore-Ester complex, 12 to 70 percent slopes	131
			Steese-Gilmore complex, 12 to 20 percent slopes	176	Gilmore-Steese complex, 3 to 15 percent slopes	132
			Steese-Gilmore complex, 20 to 30 percent slopes	177	Goldstream peat, 0 to 3 percent slopes	133
			Steese-Gilmore complex, 30 to 45 percent slopes	178	Goldstream peat, 3 to 7 percent slopes	134
			Steese-Gilmore complex, 45 to 70 percent slopes	179	Goldstream-Histels complex, 0 to 3 percent slopes	135
			Tanacross peat	180	Histels	136 137
			Tanana mucky silt loam Tanana-Mosquito complex	181 182	Jarvis fine sandy loam Jarvis-Chena complex	137
			Typic Cryaquent, Histic Cryaquept, and Terric	183	Jarvis-Criefia complex Jarvis-Salchaket complex	139
			Cryofibrist soils	103	Lemeta peat	140
			Typic Cryorthents, pit spoil	184	Liscum-Noonku complex	140
			Typic Cryorthents-Urban land complex	185	Minto silt loam, 0 to 3 percent slopes	142
			Urban land	186	Minto silt loam, 3 to 7 percent slopes	143
			Water	187	Minto silt loam, 7 to 12 percent slopes	144

CIAL SYMBOLS FOR **SOIL SURVEY**

IONS AND SYMBOLS

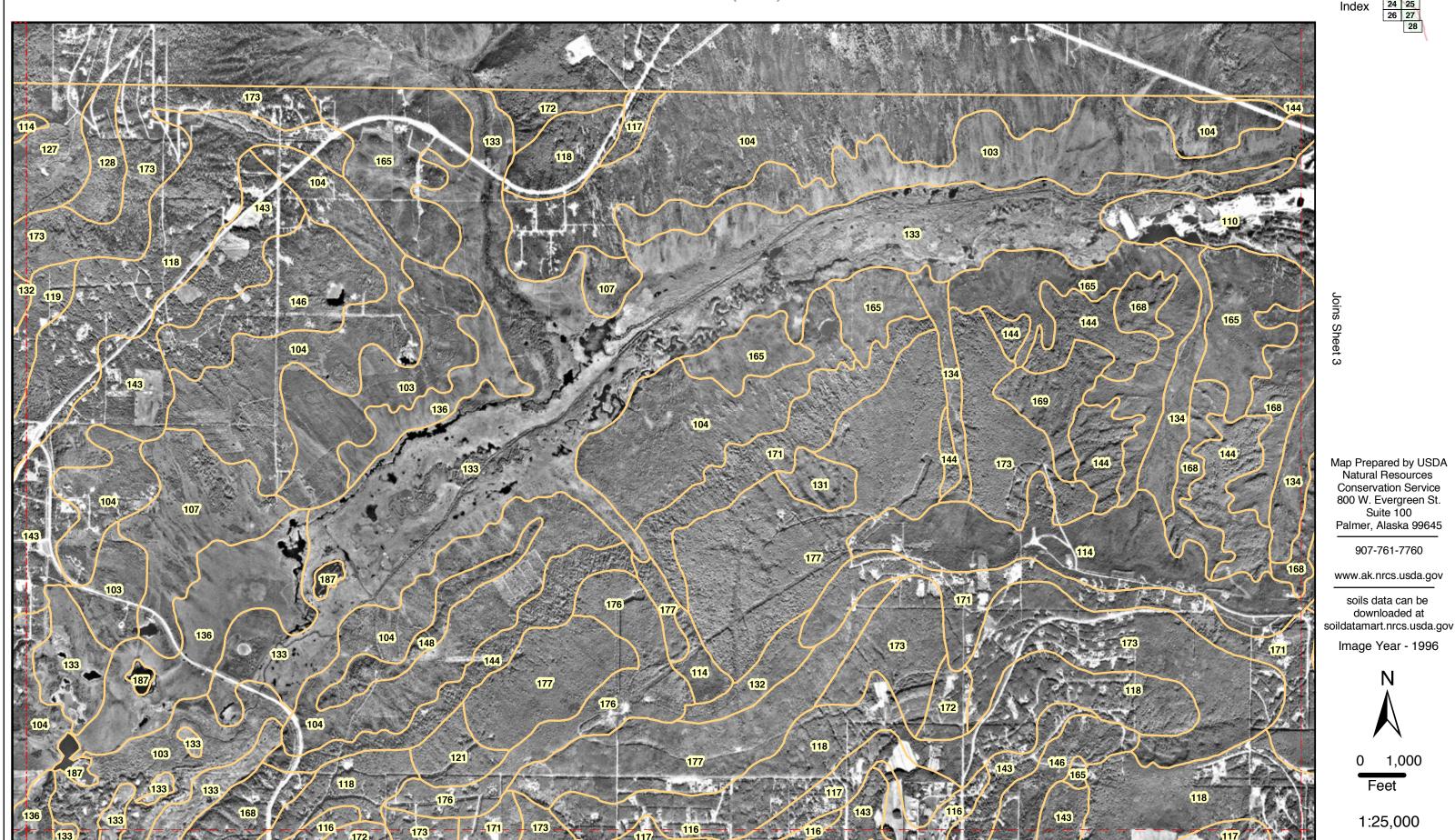
Greater Fairbanks Soil Survey Area, Alaska Sheet 1 (of 28)

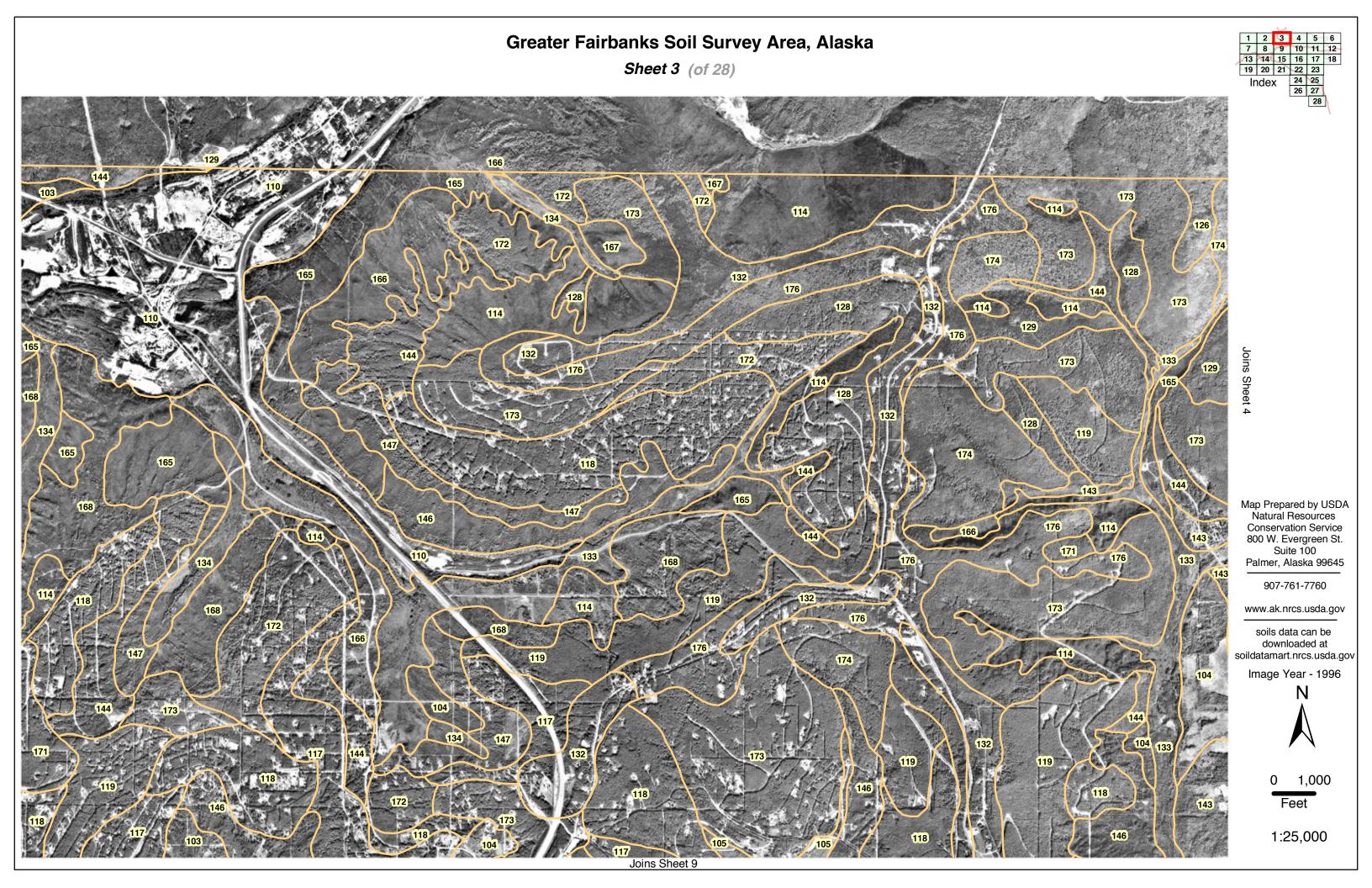


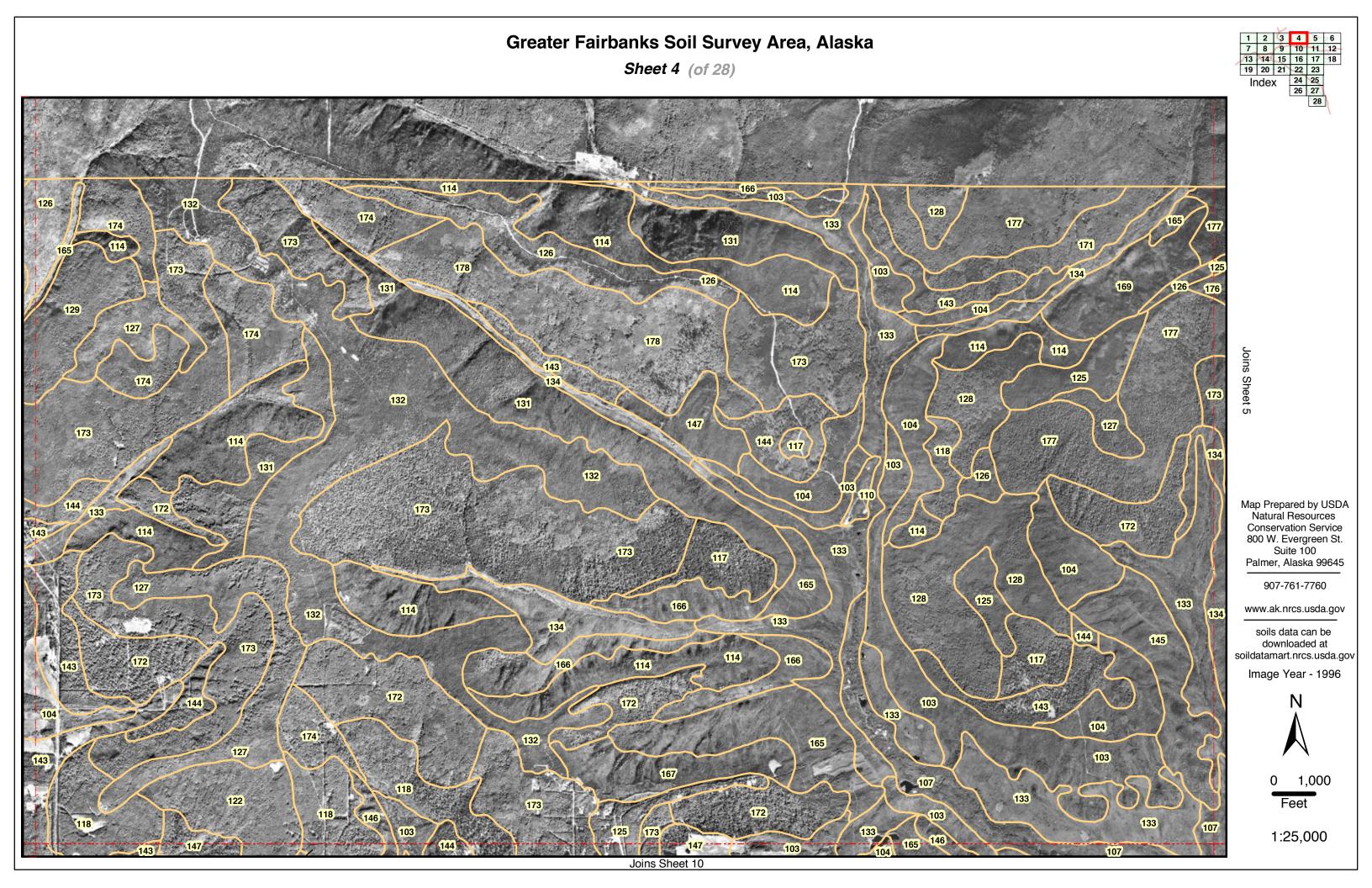


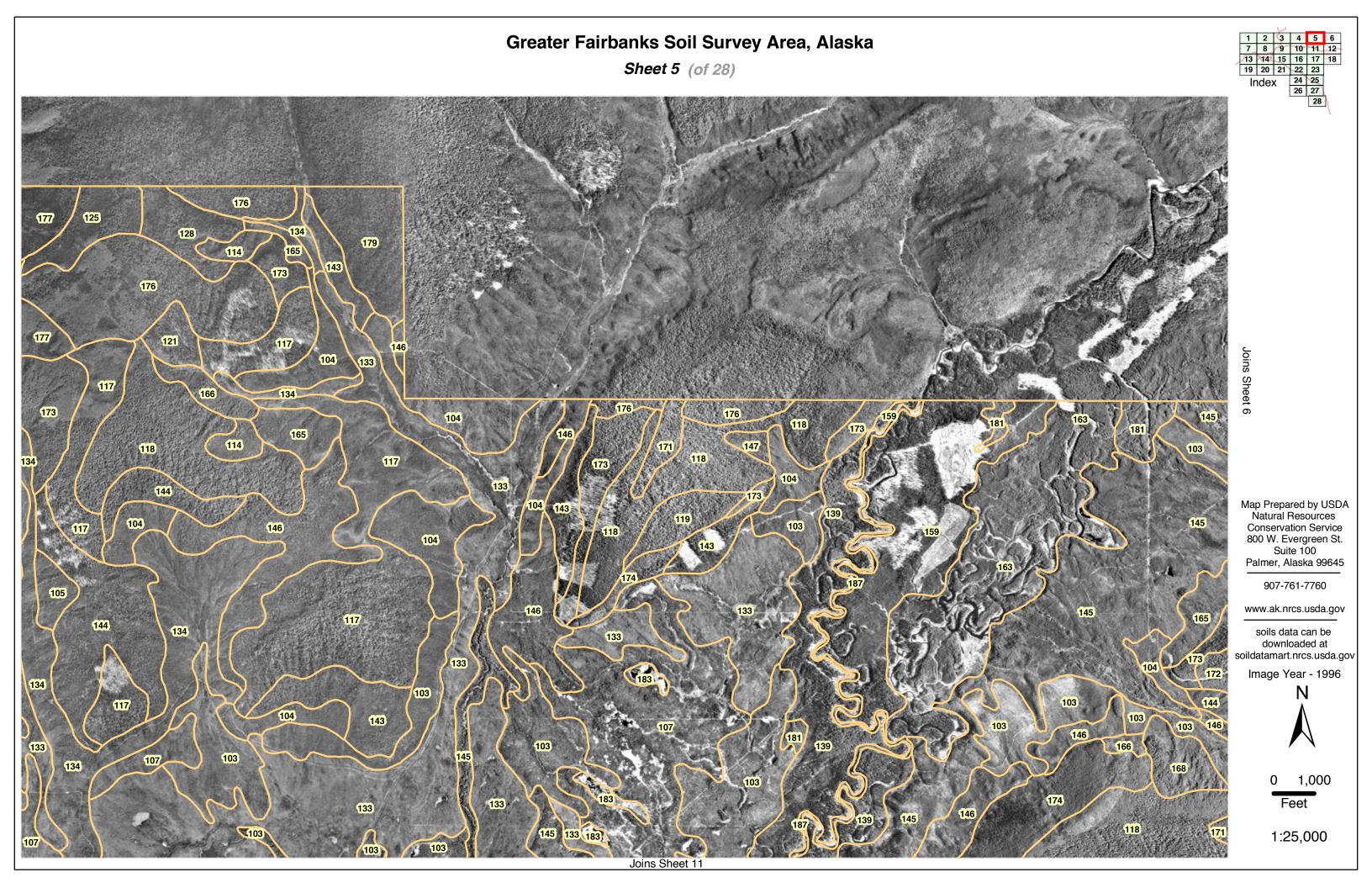
Greater Fairbanks Soil Survey Area, Alaska Sheet 2 (of 28)















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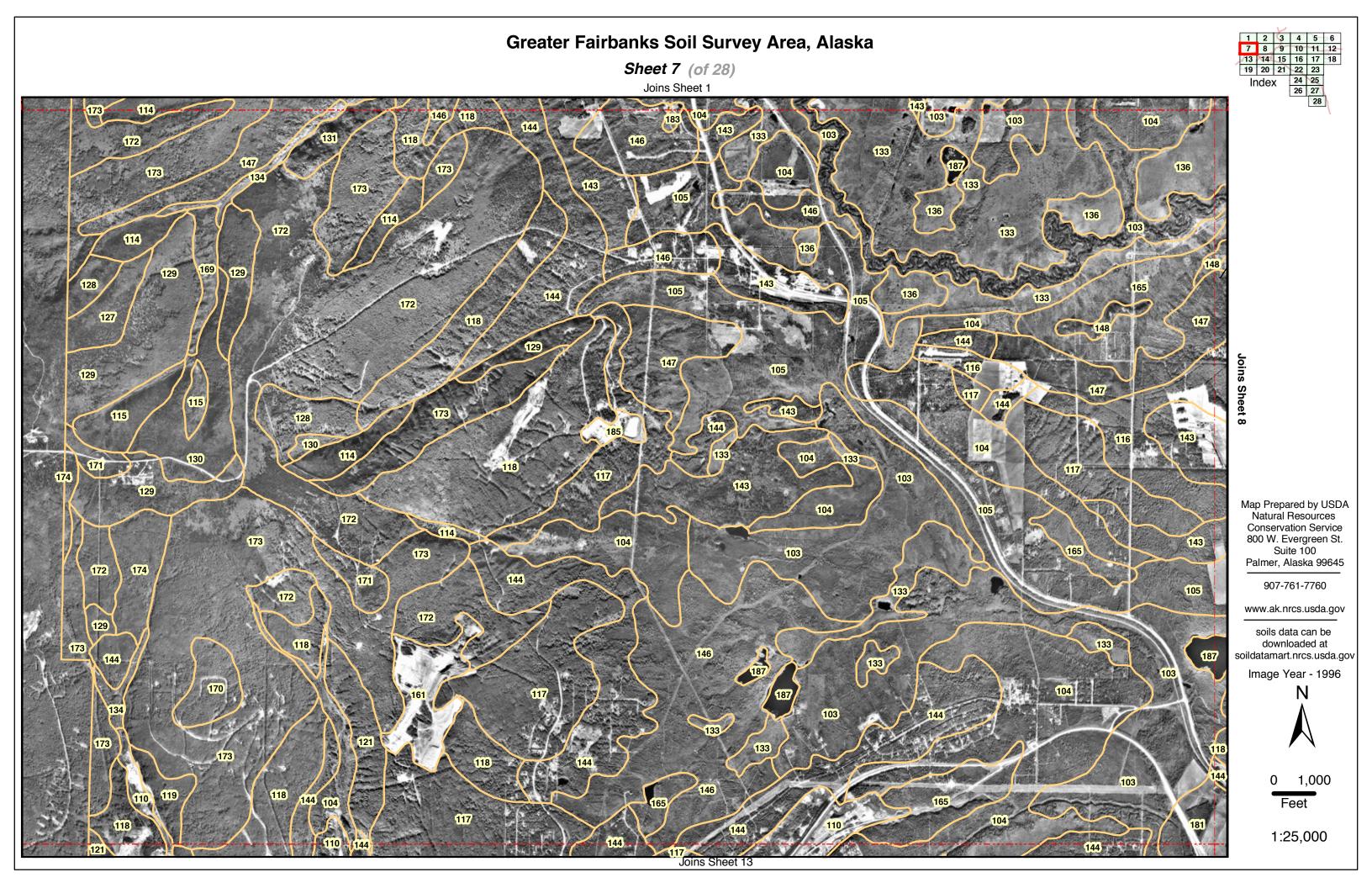
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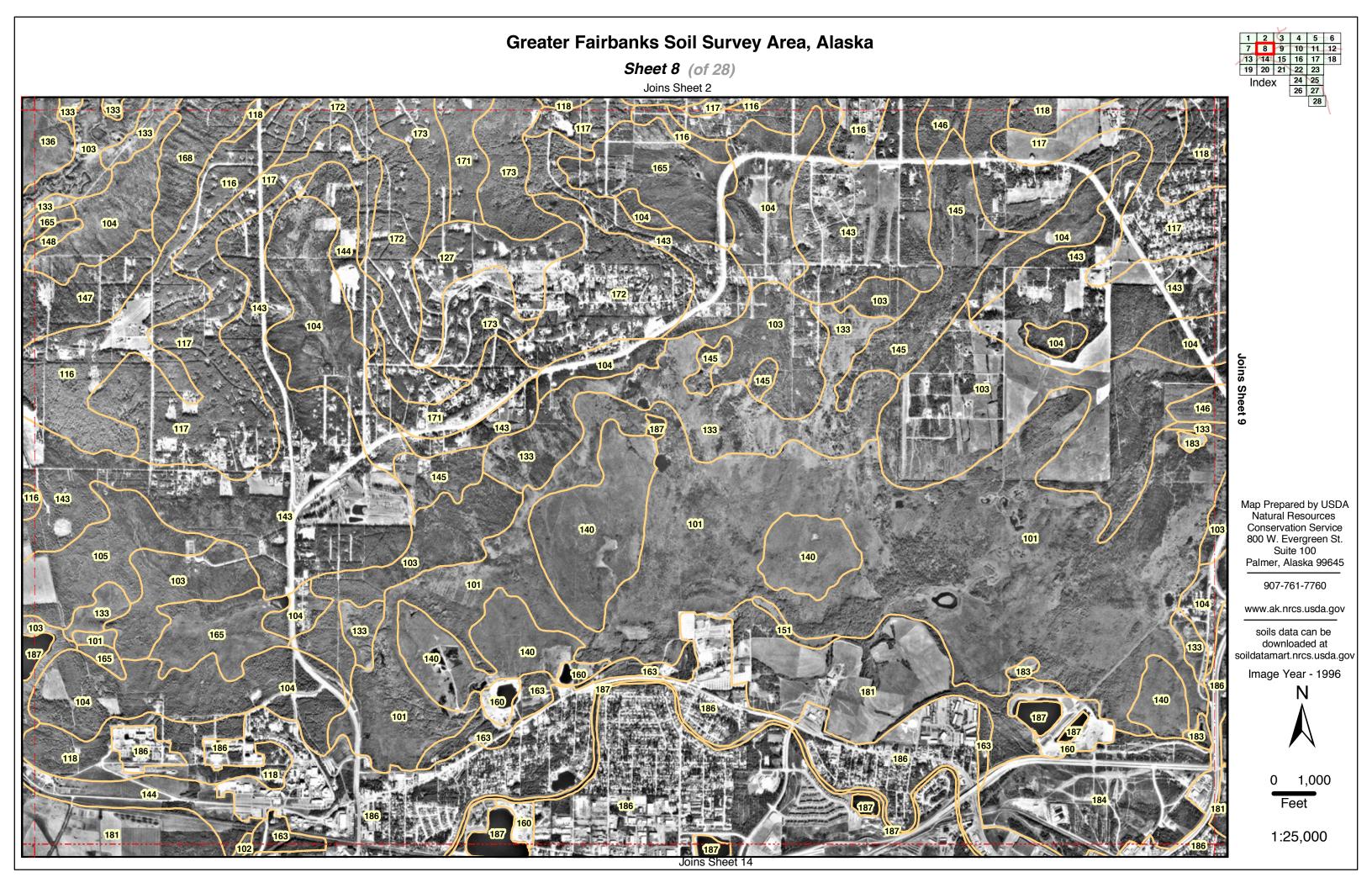
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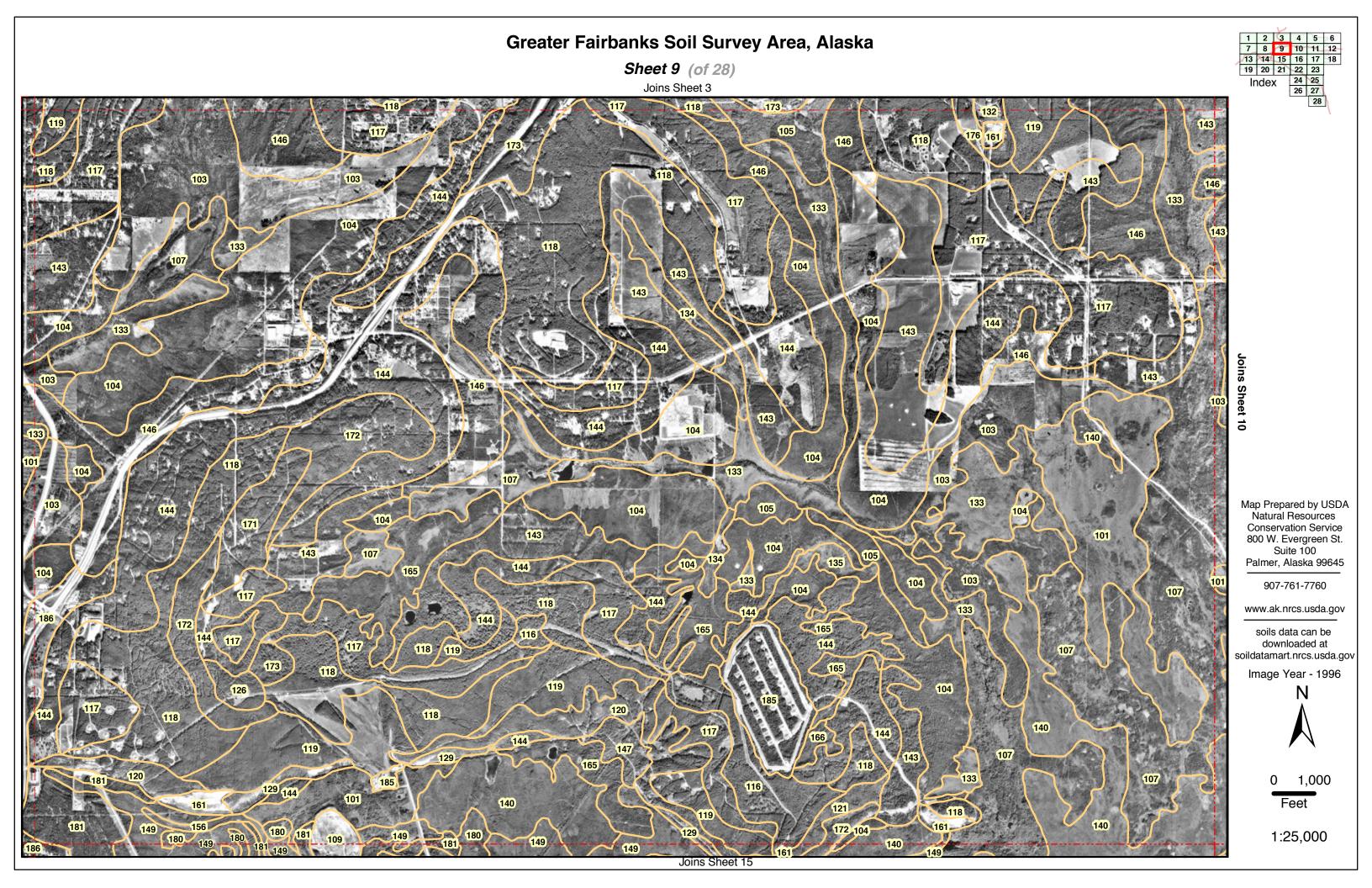


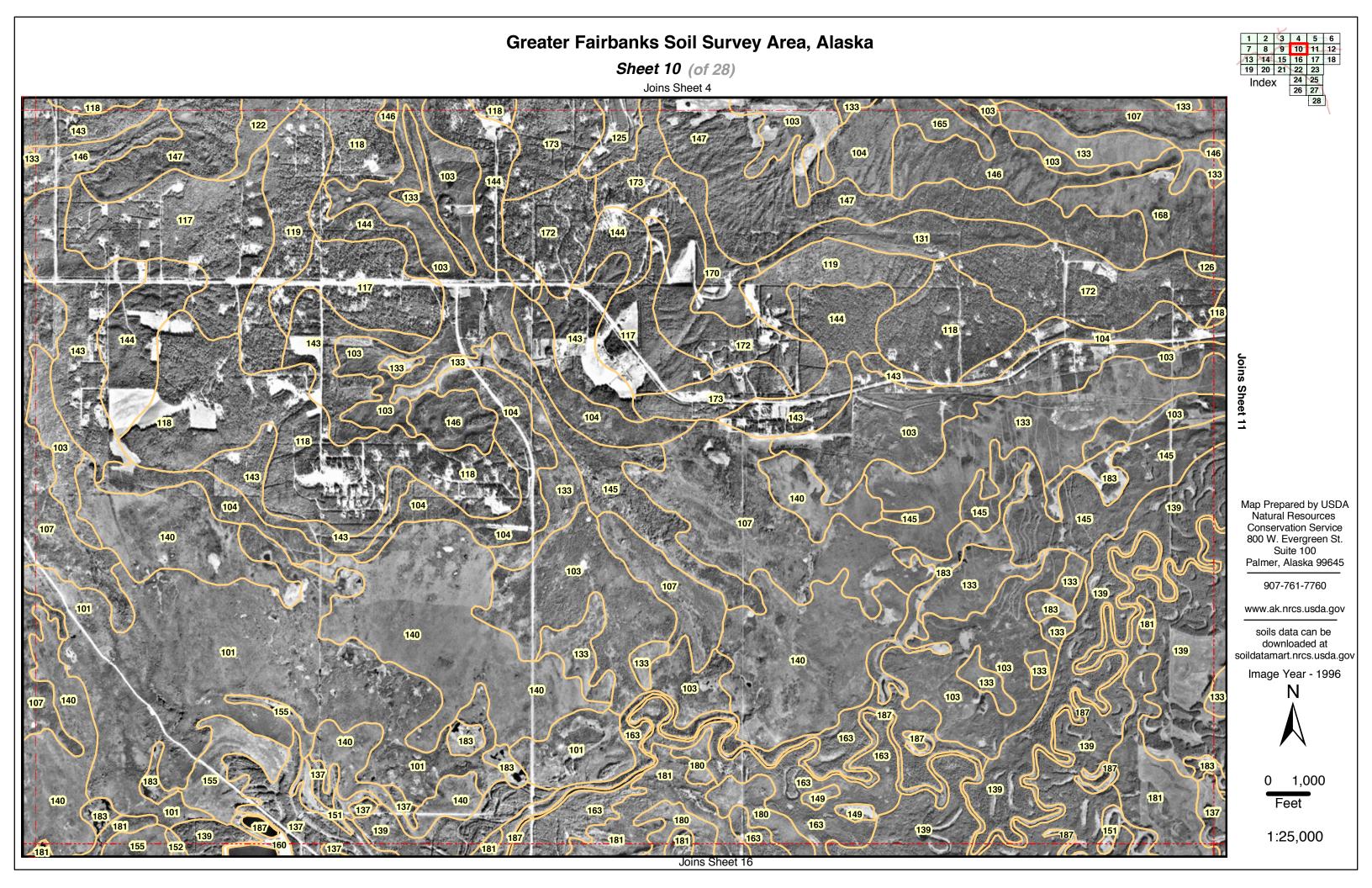
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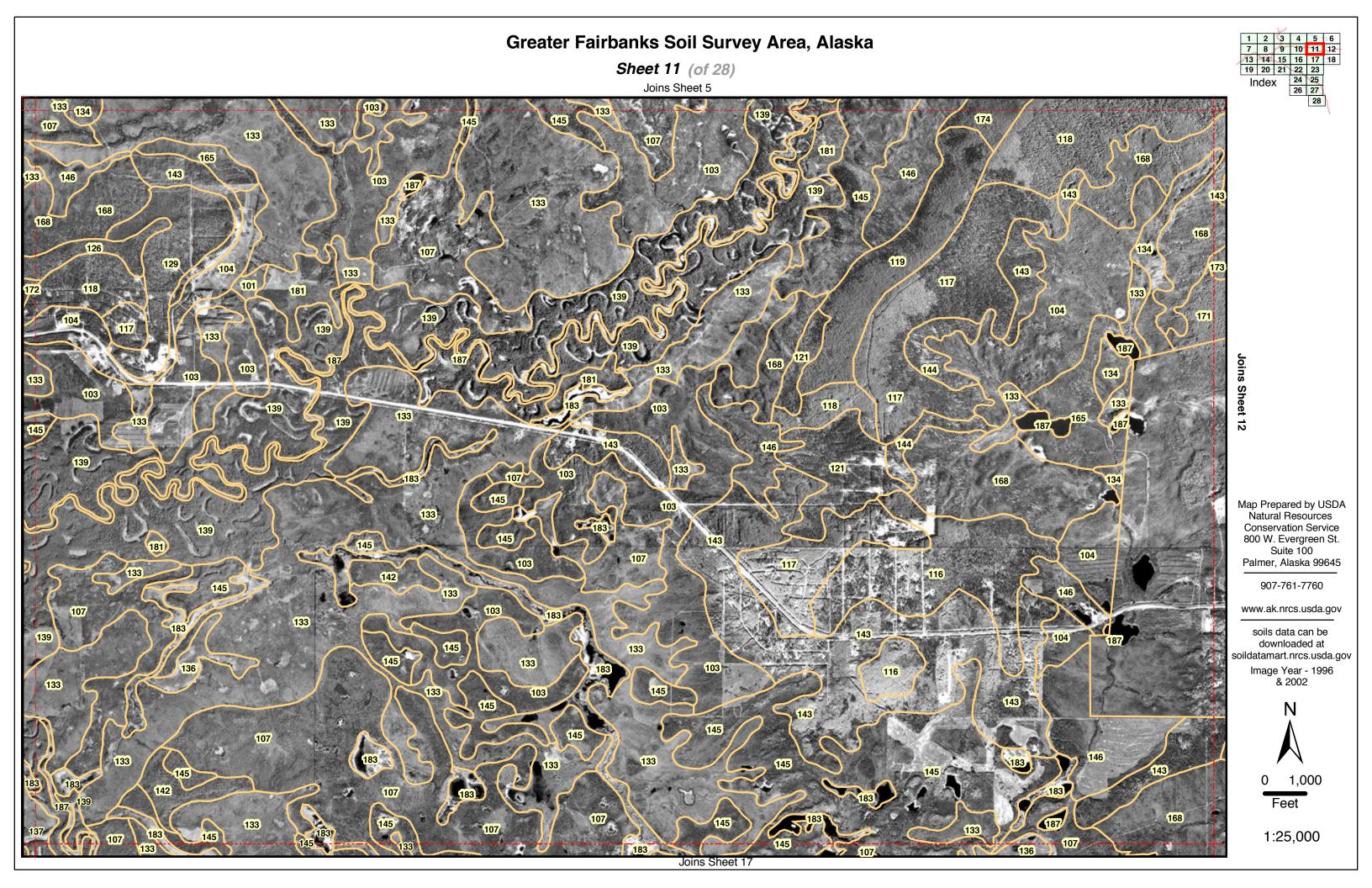
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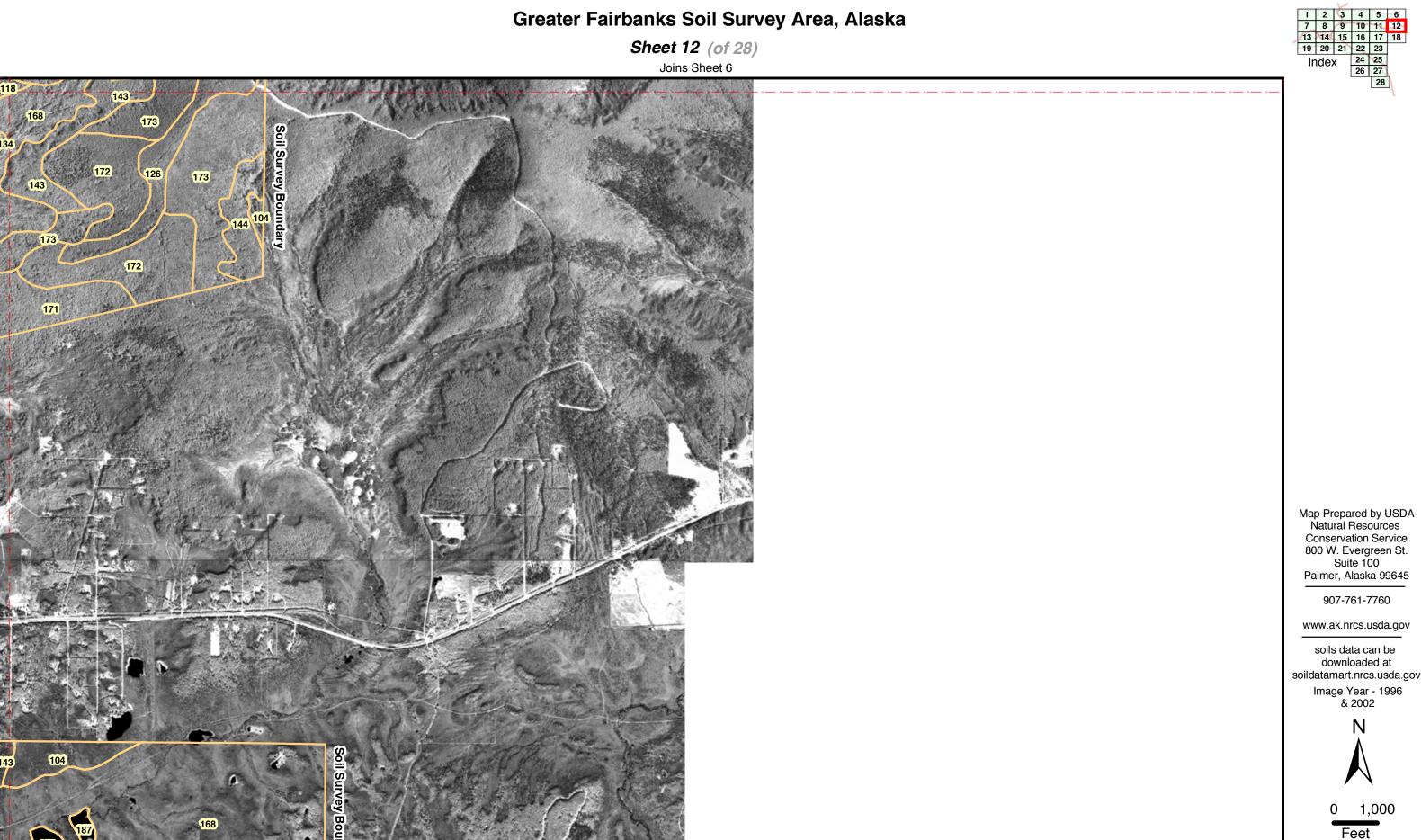






Sheet 12 (of 28)

Joins Sheet 6

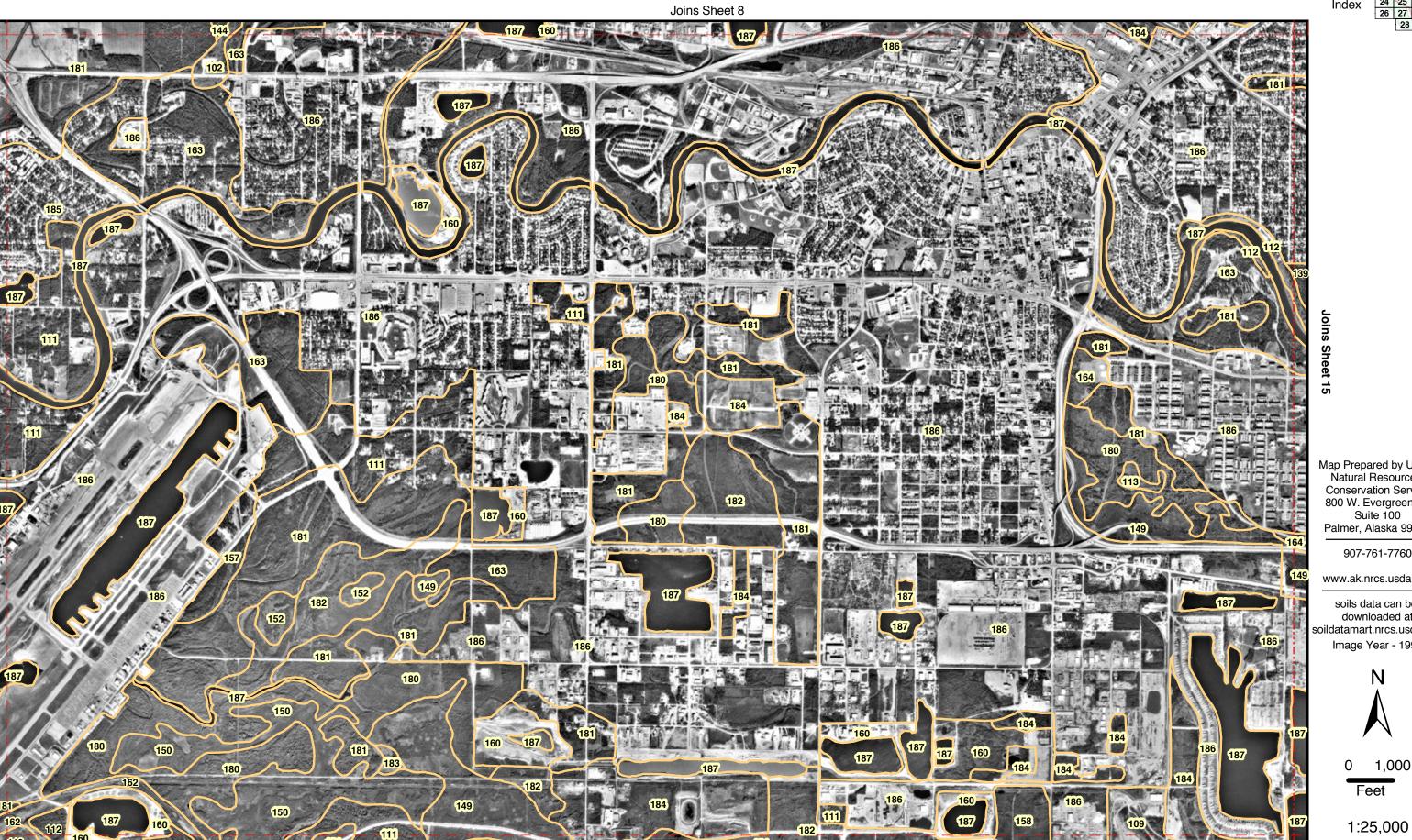


Joins Sheet 18

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Index 24 25 26 27 **Greater Fairbanks Soil Survey Area, Alaska** Sheet 13 (of 28) Joins Sheet 7 165 123 104 Map Prepared by USDA Natural Resources Conservation Service 800 W. Evergreen St. Suite 100 Palmer, Alaska 99645 127 104 107 907-761-7760 www.ak.nrcs.usda.gov 104 soils data can be downloaded at soildatamart.nrcs.usda.gov Image Year - 1996 121 166 118 166 168 143 Feet 140 182 1:25,000

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Sheet 14 (of 28)



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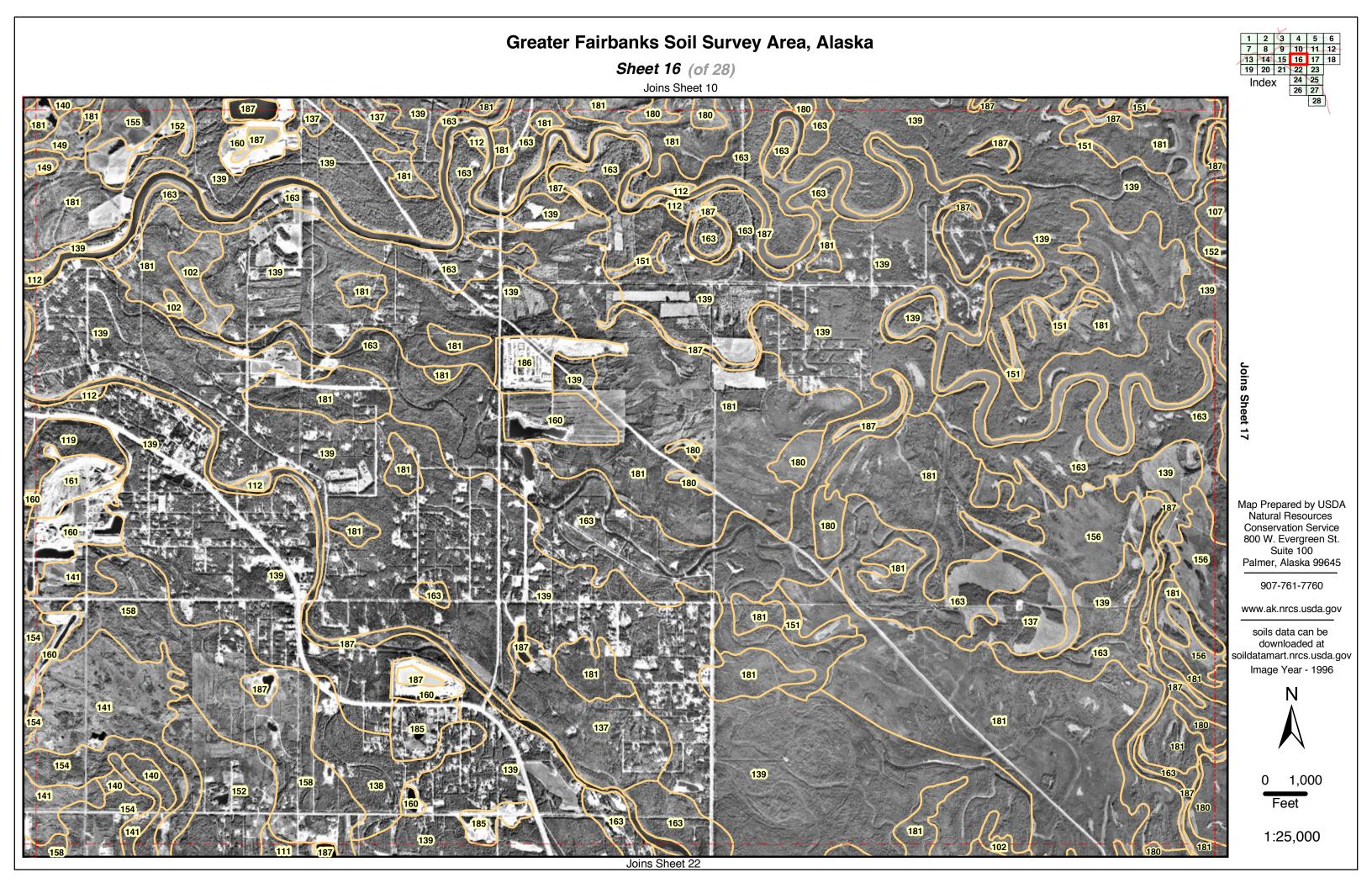
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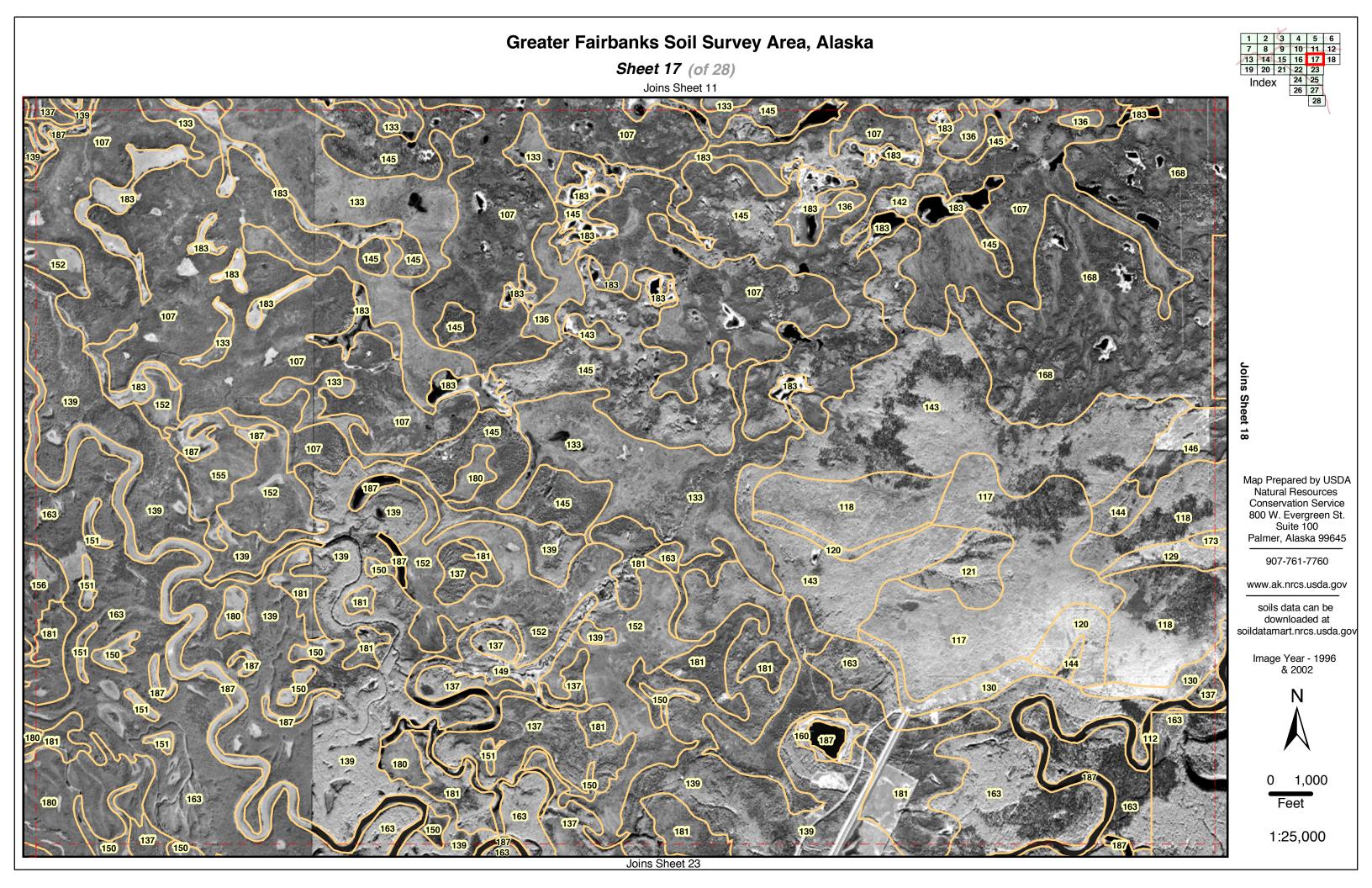
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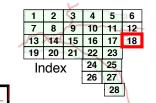
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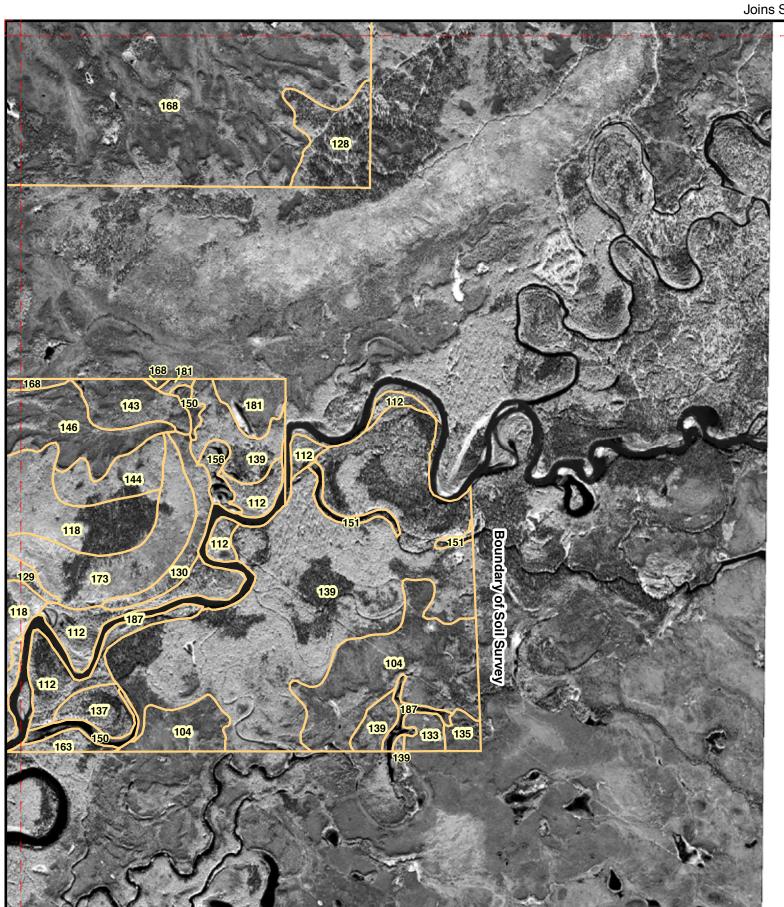




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Joins Sheet 12





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Sheet 19 (of 28)



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Index 24 25 26 27

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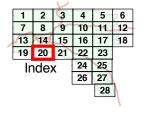


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Sheet 20 (of 28)

Joins Sheet 14





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907-761-7760

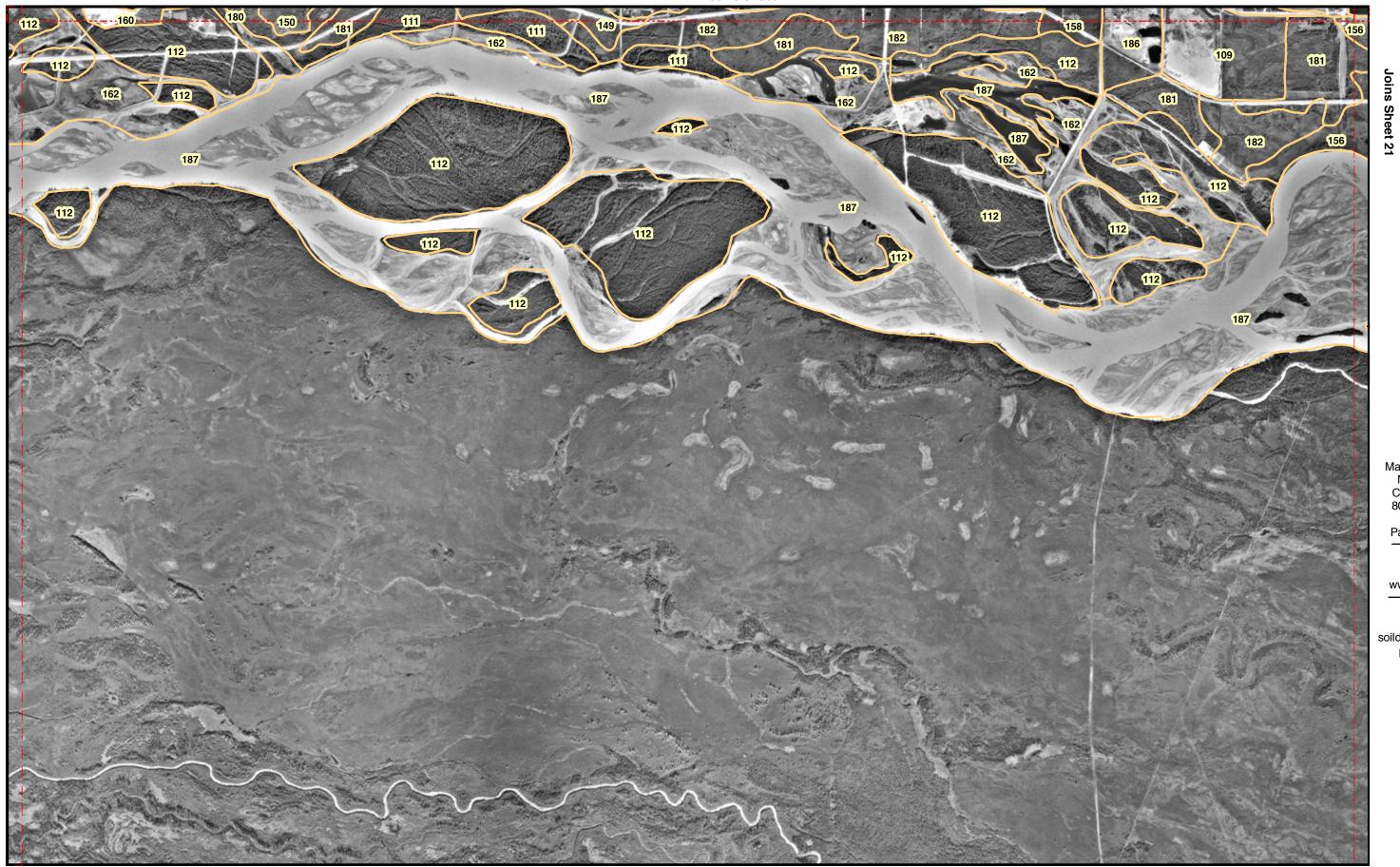
www.ak.nrcs.usda.gov

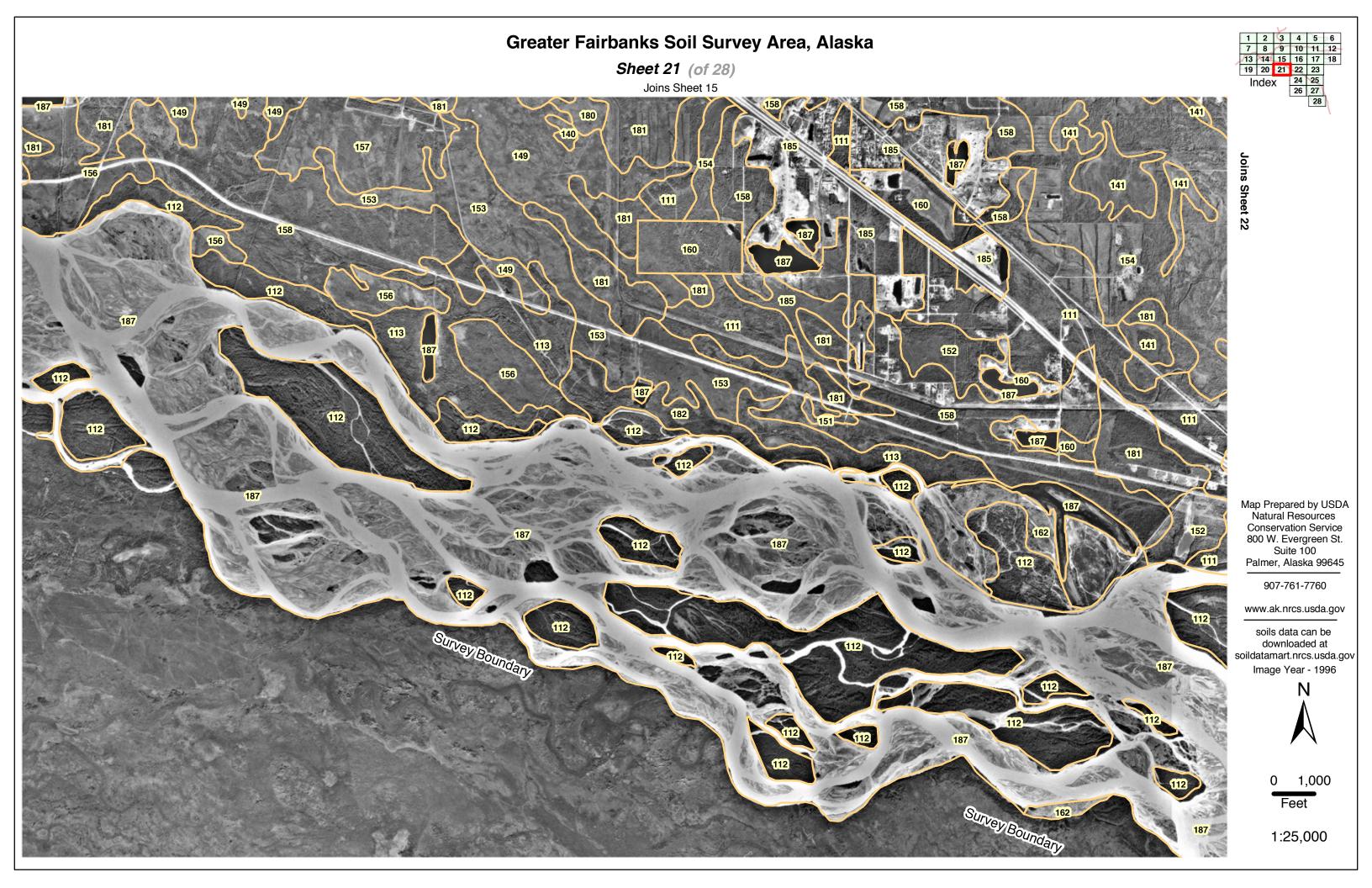
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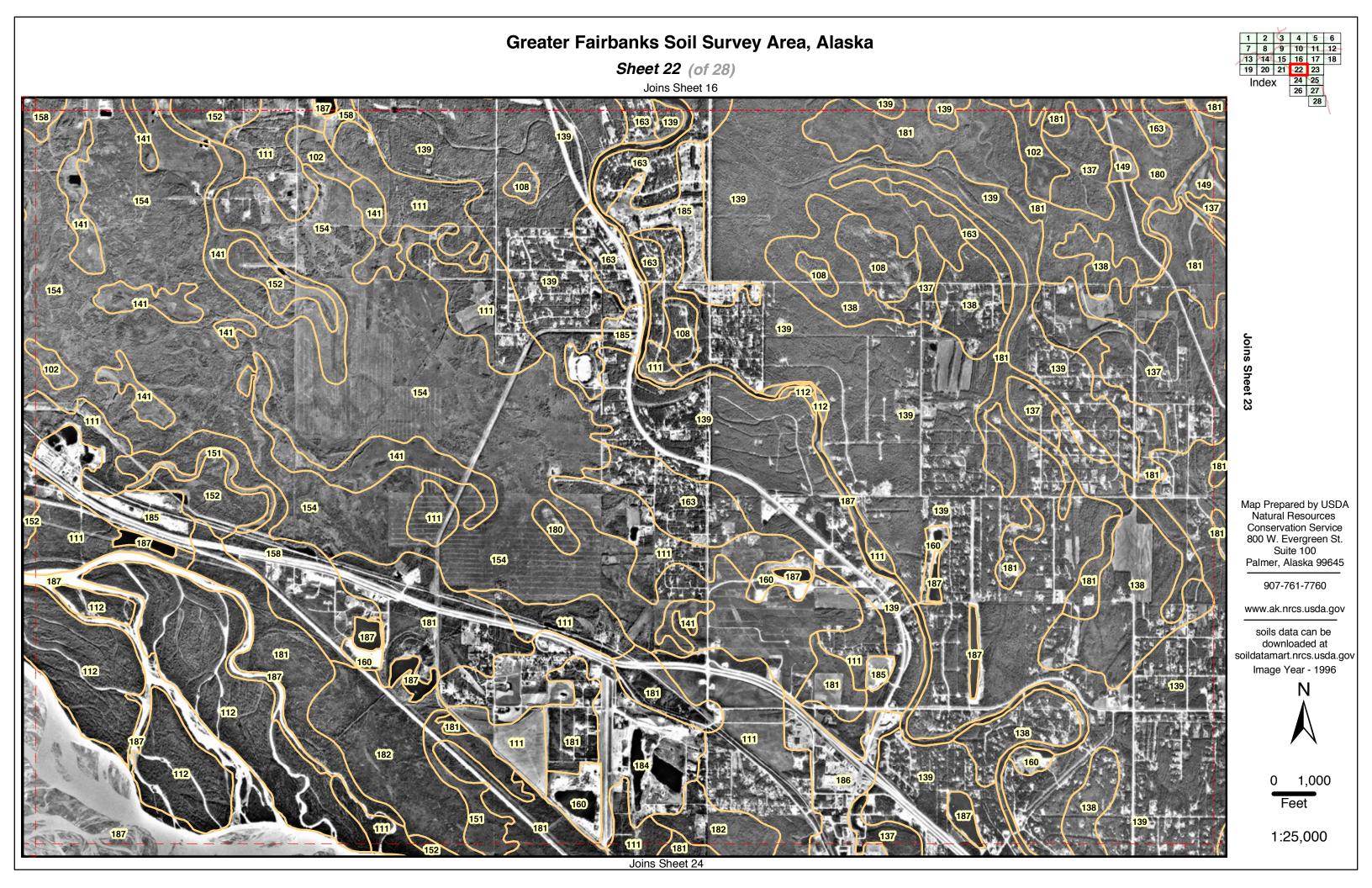


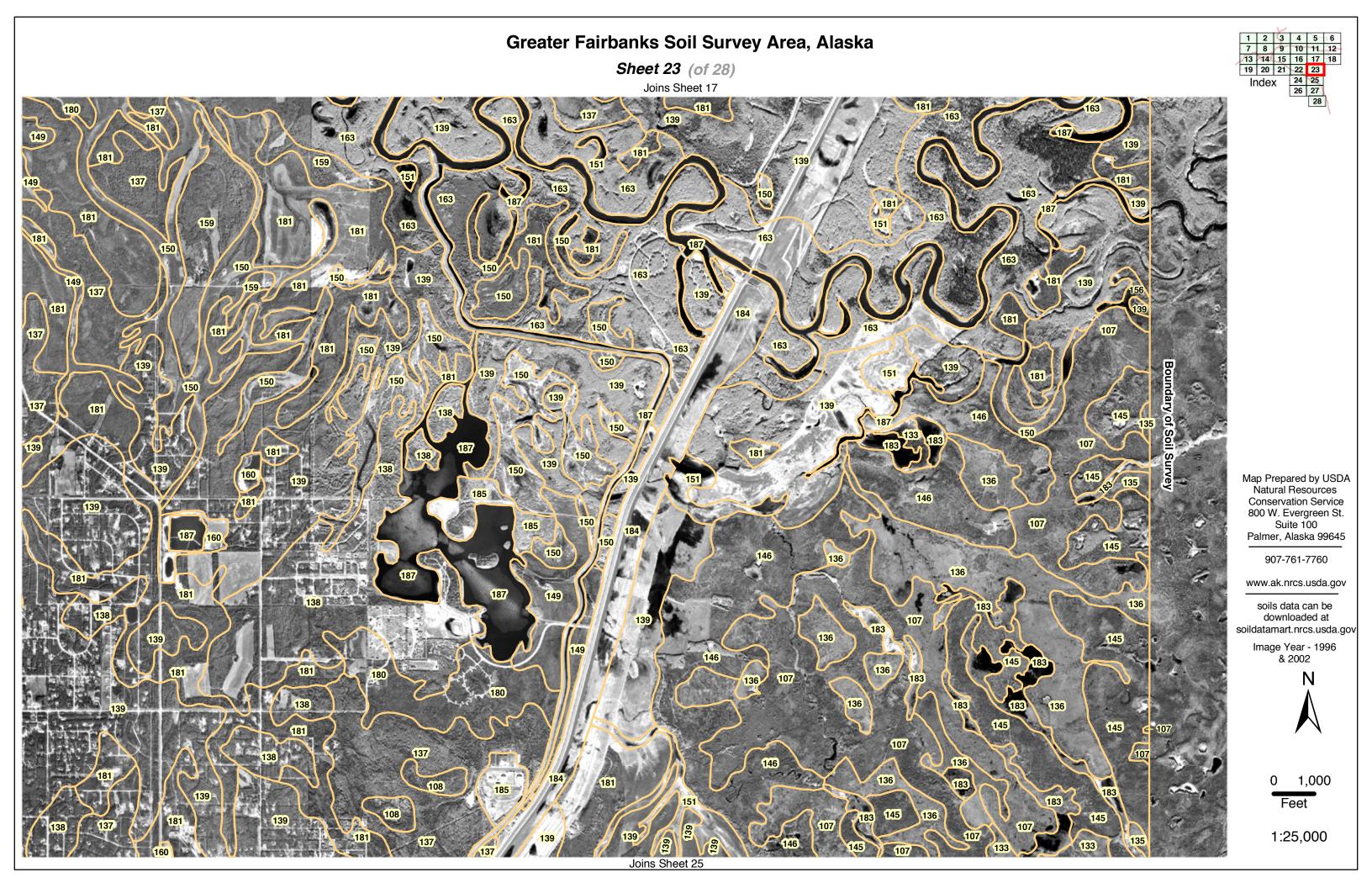
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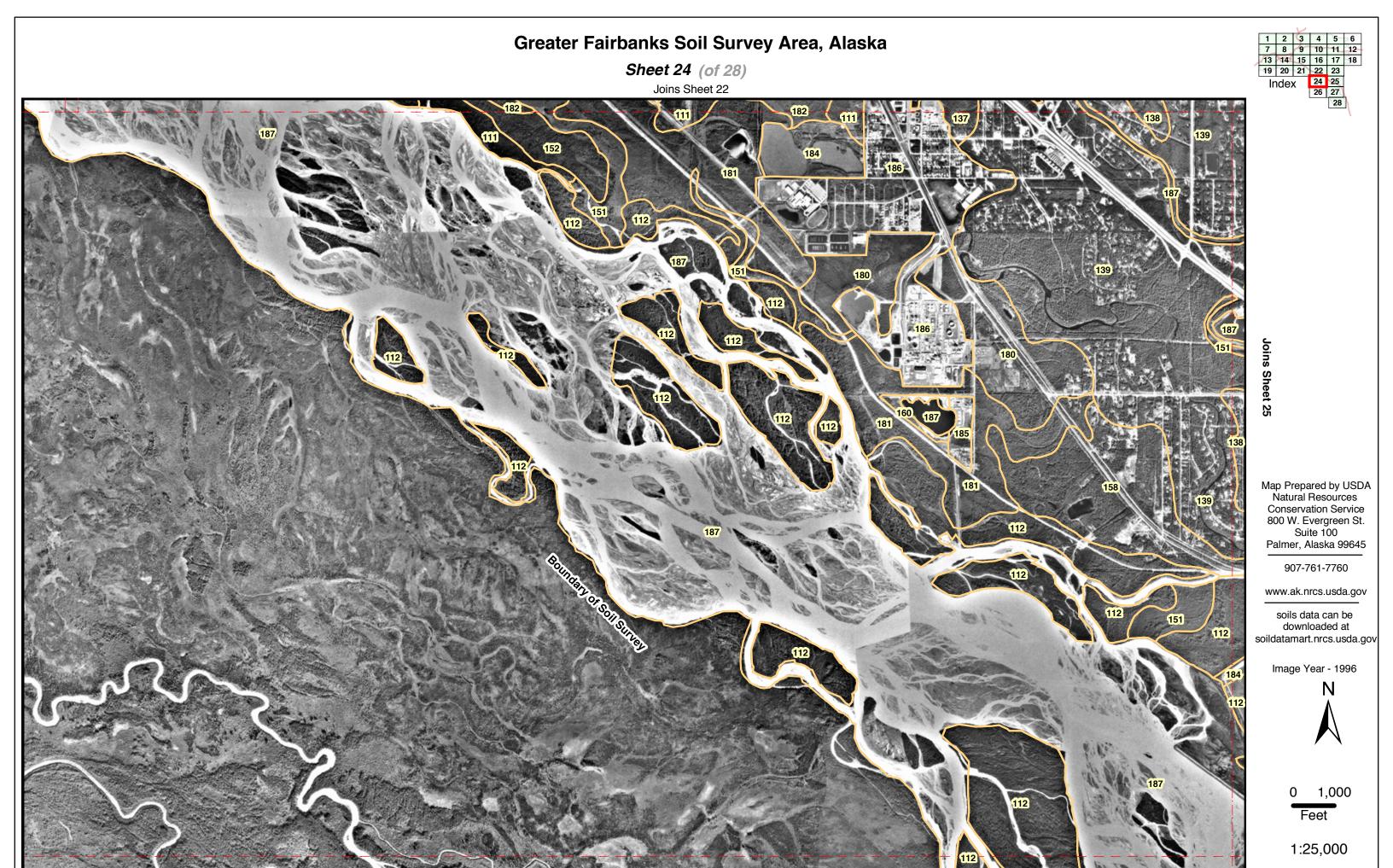
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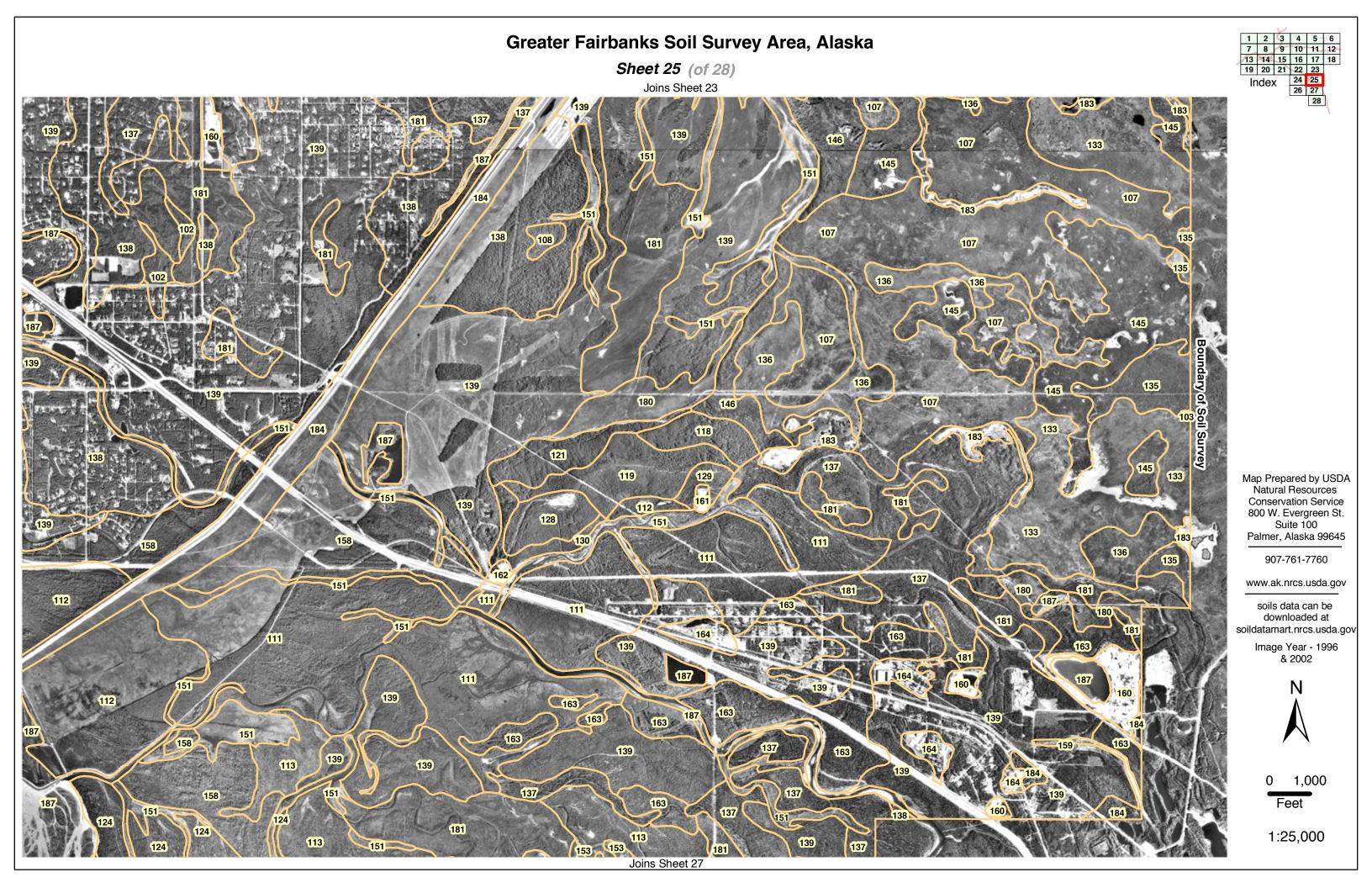


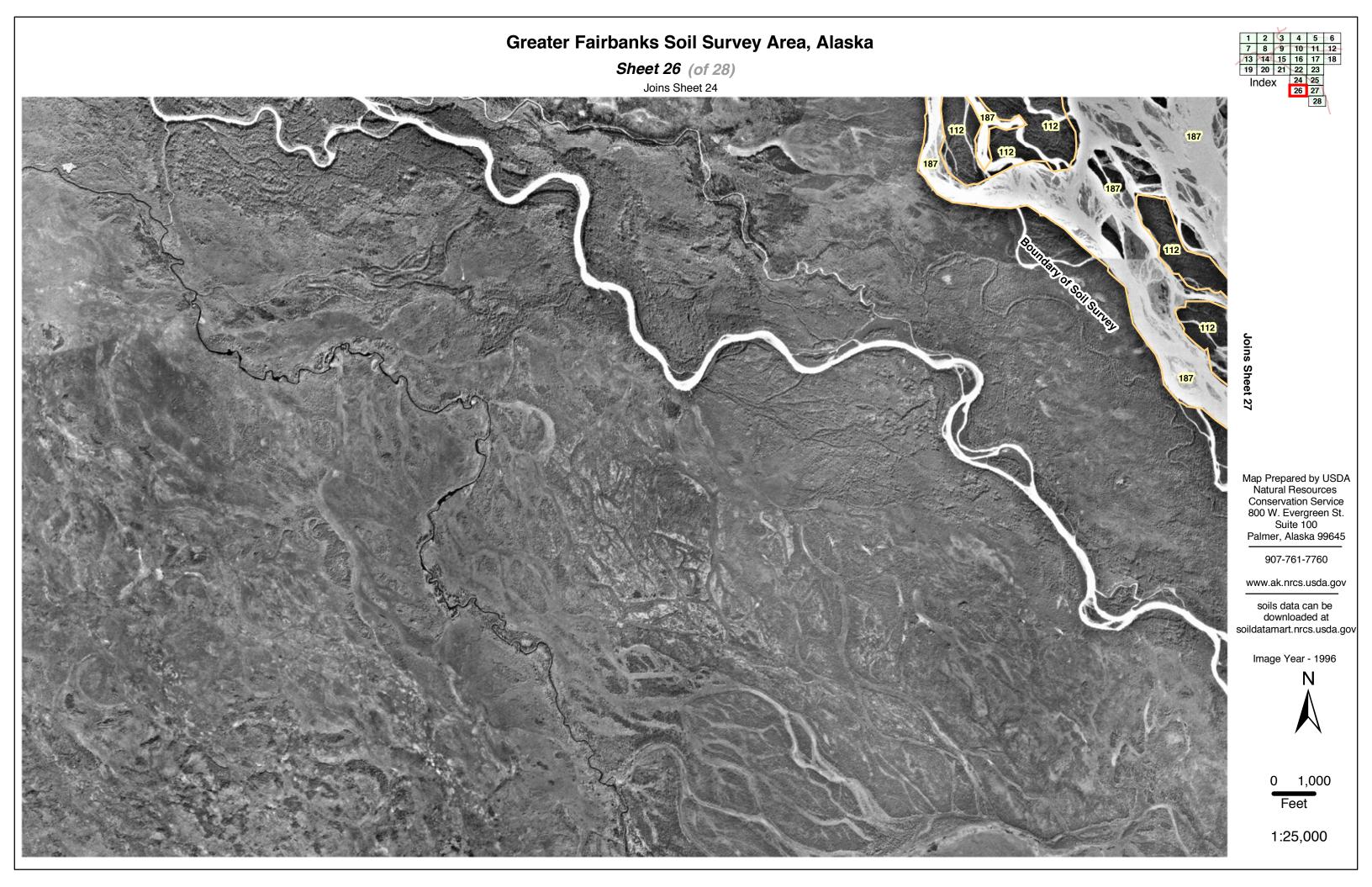












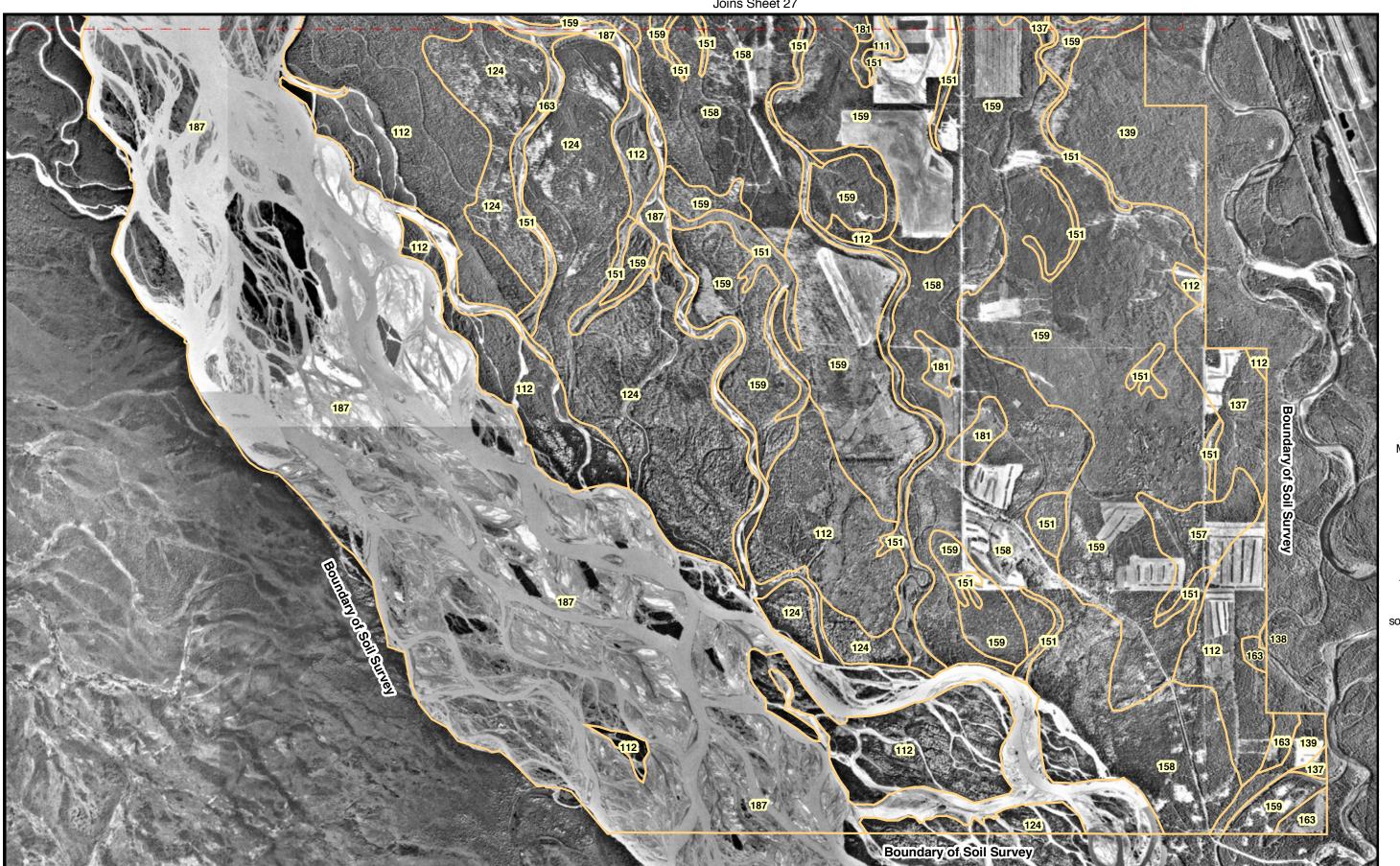
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Index 24 25 26 27 28 **Greater Fairbanks Soil Survey Area, Alaska** Sheet 27 (of 28) Joins Sheet 25 113 124 124 151 113 153 137 181 124 113 113 Map Prepared by USDA Natural Resources Conservation Service 800 W. Evergreen St. Suite 100 Palmer, Alaska 99645 907-761-7760 www.ak.nrcs.usda.gov soils data can be downloaded at soildatamart.nrcs.usda.gov Image Year - 1996 1,000 Feet

Joins Sheet 28

Sheet 28 (of 28)

Joins Sheet 27





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Image Year - 1996



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